

OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 06:19:23 ; Search time 56 Seconds
(Without alignments)
7343.813 Million cell updates/sec

Title: US-09-910-186a-7
Perfect score: 1341
Sequence: 1ggattcacatggccaaacaa.....9gacccgaatagataagaattc 1341

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5A-COMB.seq: *
2: /cgn2_6/ptodata/1/ina/5B-COMB.seq: *
3: /cgn2_6/ptodata/1/ina/6A-COMB.seq: *
4: /cgn2_6/ptodata/1/ina/6B-COMB.seq: *
5: /cgn2_6/ptodata/1/ina/PCNUC-COMB.seq: *
6: /cgn2_6/ptodata/1/ina/backfiles.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match length	DB	ID	Description	
1	522.4	39.0	3509	4	US-09-255-829-19	Sequence 19, Appl	
2	263	19.6	1330	1	US-09-480-602A-22	Sequence 22, Appl	
3	263	19.6	1330	2	US-09-480-602A-22	Sequence 22, Appl	
4	263	19.6	1330	4	US-09-915-36-22	Sequence 22, Appl	
5	263	19.6	1402	1	US-08-480-602A-25	Sequence 25, Appl	
6	263	19.6	1402	2	US-08-480-602A-25	Sequence 25, Appl	
7	263	19.6	1402	4	US-08-915-136-25	Sequence 25, Appl	
8	131.4	9.8	1359	1	US-07-618-312A-3	Sequence 3, Appl	
9	131.4	9.8	1359	1	US-08-280-228-3	Sequence 3, Appl	
10	123	9.2	3891	1	US-08-480-602A-27	Sequence 27, Appl	
11	123	9.2	3891	2	US-08-405-496A-27	Sequence 27, Appl	
12	123	9.2	3891	4	US-08-910-136-27	Sequence 27, Appl	
13	70.6	5.3	5163	3	US-08-700-651-1	Sequence 1, Appl	
14	70.6	5.3	5163	3	US-08-920-351B-4	Sequence 4, Appl	
15	70.6	5.3	5318	3	US-08-700-651-2	Sequence 4, Appl	
16	70.6	5.3	5318	3	US-08-928-361B-3	Sequence 3, Appl	
17	54	4.8	5511	2	US-08-920-361B-2	Sequence 2, Appl	
18	64	4.8	7334	3	US-08-928-361B-1	Sequence 1, Appl	
19	55.4	4.1	1359	1	US-07-618-312A-1	Sequence 1, Appl	
20	55.4	4.1	1359	1	US-08-110-786A-7	Sequence 7, Appl	
21	55.4	4.1	1359	1	US-08-20-28-1	Sequence 1, Appl	
22	55.4	4.1	1858	1	US-08-668-381A-6	Sequence 6, Appl	
23	43.4	3.2	1430	2	US-08-276-452A-25	Sequence 25, Appl	
24	43.4	3.2	1430	2	US-08-278-744-25	Sequence 25, Appl	
25	40.4	3.0	1690	1	US-08-276-452A-24	Sequence 24, Appl	
26	40.4	3.0	1690	2	US-08-798-744-24	Sequence 24, Appl	
27	38.4	2.9	198	5	PCT-US95-10668-4	Sequence 4, Appl	
28	38.4	2.9	2574	4	US-09-255-829-28	Sequence 28, Appl	
29	37.6	2.8	9046	1	US-09-227-536-1	Sequence 1, Appl	
30	36.8	2.7	9046	5	PCT-US95-04682-1	Sequence 1, Appl	
31	36.8	2.7	32	36.6	2.7	US-00-024-0208-8	Sequence 8, Appl
32	36.6	2.7	6826	3	US-09-425-043-8	Sequence 8, Appl	
33	36.6	2.7	8147	4	US-09-51-247-9	Sequence 9, Appl	
34	36.4	2.7	1149	4	US-09-422-487-6	Sequence 6, Appl	
35	36	2.7	1149	4	US-09-378-088-128	Sequence 128, Appl	
36	36	2.7	18596	4	US-09-318-448-11	Sequence 11, Appl	
37	36	2.7	3378	1	US-07-972-791-1	Sequence 1, Appl	
38	35.6	2.7	198	5	PCT-US95-0668-1	Sequence 2, Appl	
39	35.2	2.6	198	5	PCT-US95-10668-2	Sequence 1, Appl	
40	35.2	2.6	4291	4	US-09-351-200-1	Sequence 1, Appl	
41	35	2.6	5977	3	US-09-024-020B-1	Sequence 1, Appl	
42	35	2.6	6007	3	US-09-425-043-1	Sequence 2, Appl	
43	35	2.6	607	3	US-09-425-020B-2	Sequence 2, Appl	
44	35	2.6	6007	4	US-09-425-043-2	Sequence 2, Appl	

SEQUENCE INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 3509 base Pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..3509

US-09-255-829-19

Query Match 39.0%; Score 522.4; DB 4; Length 3509;
 Best Local Similarity 71.7%; Pred. No. 4; 3e-141;
 Matches 685; Conservative 0; Mismatches 271; Indels 0; Gaps 0;

QY 10 ATGCCGACAACTCAGTCCGAATCGAACATTCGACATCGGACCTGGCTACAA 69
 Db 2554 ATGTTAATAAAATTAATAGCGAAATTAAATATATCTTAATTAAATAG 2613
 QY 70 GACACATCTGTGATCTGCTGTTACGGTCAAGTGAAGTAGCAGGGTT 129
 Db 2614 GATATAATTAATAGTTACGATGTTACGAGATGGGGATATGGGGACT 2673

QY 130 GAACGTGATGACAGAACGAGCAGTCMAACTGACCTCTCGCTAATCTAGATCGCTGCT 189
 Db 2674 GAGCTTAATGATAAATCAATTAAATTAATCTAGATGTCAGAACATAGAGTC 2733

QY 190 ACTGAGATCAGACATCACTTCACCTCGTATTCGACTCTGCTTCTTCCTG 249
 Db 2734 ACTCAAACAGATACTTAAATAGTGTTGCTGTTAGCTTACGGTTGG 2793

QY 250 ATTCGATTCGGAATACAAAGAGCGGTTCCGAATACATCACATGAAAC 309
 Db 2794 ATAGAAATACCTAAATTAAGATGATGTTACAAATATCATGAAATACA 2853

QY 310 ATCATCACTGATGACATAACTCTGGTGGAACTTCATCGCGCTACCGTAC 369
 Db 2854 ATATTAATATGTATGAAATAATTCGGCTGAAATACTATTAAGGTTAATAGATA 2913

QY 370 ATCGGACTCTGTGATGAAATCACGAGAACATCTGATCTTCATACAC 429
 Db 2914 ATATGCACTTAATGATGAAACAAATCGGTTTGTATRACA 2973

QY 430 CGTGRAGACATCTGTGATACATCAAGCGGGTTCTCGTACATCCAC 489
 Db 2974 AGAGAGATATCAGAGTATAATAGATGGTTTGTAACTTAAATATTG 3033

QY 490 AACATGCTAAACTCTGATCACGGAACTTGGAATCTAACGACATCAAGAC 549
 Db 3034 AATAACGCTAAATTAATGATGAACTGAGATATGAA 3093

QY 550 CGTGAAATTCGCTAAGGTGAATCTCAACTGGGACATCGATGCTAC 609
 Db 3094 AGAGAGATTTGTAATGGAATATTAATTAATTTAATGATGATAGACA 3153

QY 610 CAGTCATCTGGTGAATACTCTCCAACTCAGACCGACIGCTGCTGCAATC 669
 Db 3154 CAATTATGGAAATATTICAGATTTAATCAGATTAACGATTAAGTCAAT 3213

QY 670 GAGAGCTGACAGATCAGTTACGGTACTCCGAACTCTGAGACTCTGGGAATCG 729
 Db 3214 GAAGAAATATAATCACTATGAGATTTGGAACT 3273

QY 730 CTGATGACACAAAGAACTAAATGATGCTAGCTGCTGGACAGACTTACATCAA 789
 Db 3274 TTAATGACATAAGATATTAATGTTATGCGGGGATAAAATCATATAA 3333

QY 850 AAATCATCACTCCGGACCTGATCTGAGAAAGTCATCATCCCTCGAAATC 909
 Db 3394 AATATATAATTTAGATGTTGGAGAAATTATAGAGAGAACTTAACT 3453

QY 910 AACCTCACTCACTAACGATGCTGTTACCAATAGAGCTATCTCCCTGA 965
 Db 3454 ATTCCTCACTTAAAGATGATAGTTAGAGAACTGATCATCCCTCGAAATC 3509

RESULT 2
 US-08-480-604A-22
 ; Sequence 22; Application US/08480604A
 ; Patent No. 5736139

GENERAL INFORMATION:

APPLICANT: KINK, JOHN A.
 APPLICANT: TRALLEY, BRUCE S.
 APPLICANT: RADHYE, NISHA V.
 APPLICANT: STAFFORD, DOUGLAS C.
 APPLICANT: FIRCA, JOSEPH R.

TITLE OF INVENTION: VACCINE AND ANTI TOXIN FOR TREATMENT AND PREVENTION OF C. DIFFICILE DISEASE

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESS: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: CPC-DOS/MS-DOS

APPLICATION NUMBER: US/08/480,604A

FILING DATE: 07-JUN-1995
 CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/422,711
 SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

FILING DATE: 14-APR-1995
 PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 08/161,907
 FILING DATE: 31-OCT-1989
 PRIORITY APPLICATION DATA:

NAME: INGOLTA, DIANE E.
 REGISTRATION NUMBER: US 07/985,321

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791
 FILING DATE: 14-DEC-1992
 PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 PRIORITY APPLICATION DATA:

TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-3338

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:
 LENGTH: 1330 base pairs

REFERENCE/DOCKET NUMBER: OPHD-01763

TELECOMMUNICATION INFORMATION:

TOPLOGY: Linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE: NAME/KEY: CDS
 LOCATION: 1..1314

US-08-480-604A-22

Query Match 19.6%; Score 263; DB 1; Length 1330;
 Best Local Similarity 53.9%; Pred. No. 2; 5e-66;
 Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;

QY 15 CAACAAATCACTCCGAAATCTGAACTATCATCTGACCTGGTACAAAGACAA 74
 Db 24 CACTGATCATCAGAACATCATCATACCTCCATCTGAACTCGCTAGAACCTCGAA 83
 QY 75 CAATCTGATCTGCGGTTACGGTAAAGTAGGACGGTT--- 129
 Db 84 TCACCTGATGACCTGCTGCTGCTGACCTCCAAATACACAGGGTTCAAAGTAA 143

QY 130 -GAAGTGAATGACAGAACGACTTCAACTGACCTCTCCGCTAAGTCGTT 188
Db 144 CGATCGCATGCAGAACGACTTCAACTGACCTCTCCGCTAAGTCGTT 203
QY 189 TACTCAGAGTCAGAACGACTTCAACTGACCTCTCCGCTAAGTCGTT 248
Db 204 TATCCCTGAGAACGACTTCAACTGACCTCTCCGCTAAGTCGTT 263
QY 249 GATTGATACCCGAATACAGAACGAGGGTATCCAGAACATGAA 308
Db 264 GATCGGTATCCGAATACAGAACGAGGGTATCCAGAACATGAA 314
QY 309 CATCATCACITGATGAAATAACTCTGGTAGAGTCATCGGGTAACGT 368
Db 315 CATCATCACITGATGAAATAACTCTGGTAGAGTCATCGGGTAACGT 374
QY 369 CATCGGATCCGAATACAGAACGAGGGTATCCAGAACATGAA 428
Db 375 CATCGGATCCGAATACAGAACGAGGGTATCCAGAACATGAA 434
QY 429 CGGTGAGAACATCITGATGAAATAACTCTGGTAGAGTCATCGGGTAACGT 485
Db 435 GATGATCACACATCTGATGATCAATGCTGTTACCATCACACATG 494
QY 486 OCTGAAACATGCTAAATCPACATCAACGGTAACCTGATCTGTTACCATCACAC 545
Db 495 TCTGGAATACATCACAATCTACATCACCGCGCTGATGACCAGAACGATCTCAA 554
QY 546 CATCGGTAACATCTGATCAAATACATCTGTTACCATCACACATG 505
Db 555 TCTGGTAACTACATCAGCTCTAAATACATCACATGTTACCATCACAC 614
QY 606 TACCGACTCATCTGGGAAATACATCTCCAACTTCACACCAACGACTCTCAA 665
Db 615 TCAACGATACATCTGATCAAATACATCTGTTACCATCACACATG 674
QY 666 TATCGAAAGAACGTTACAGATCCAGTCTACTCCGATACTGAAAGACCTGGGATA 725
Db 675 AATCAAAAGACCTGATGACCAACGAACTTCACATGTTACCATCACAC 734
QY 726 TCGCTGTGTTACAAAGAACATACATGTTACATGTTACCATCACAC 785
Db 735 CTACCTGAGTAGACAAACGACCTACATGTTACATGTTACCATCACAC 794
QY 786 CAAACTGAGAACGACTTCGGTTGGTAATCTGATGTTACATGTTACCATCACAC 845
Db 795 TGAACGTACACAAATGTTACATGTTACATGTTACATGTTACCATCACAC 854
QY 846 CTTAAATACATCAACCCGGACCTGATCATGTTACATGTTACATGTTACCATCACAC 905
Db 855 TATGACTACCAACATCACACCTCTCCCTGTTACCAAAATCATCACAC 914
QY 905 ATTACATCTCAGTCACATGATGACATGTTACATGTTACATGTTACATCACAC 965
Db 915 GAATACCGTCTGGTACACAGAACATATGTTACATGTTACATGTTACATCACAC 974
QY 966 CTCTTCACCTGAAATGGAATGGGTTACACCTACAGACTTCAGAAAGAAA 1025
Db 975 TGTGTTACATGAAACAAAGAACATGTTACATGTTACATGTTACATGTTACATCACAC 1034
QY 1026 AGAAAGGTTCTGGCTCCGATCTGATTCGAGAACCTCACACCATCCAG 1085
Db 1035 AAAGCTCTGCTCTGGAAATCCGGACCTGTTAATGTTCTGAGTAGTTGTAAT 1094
QY 1085 CAAGAAATACAGAACGACCTCTGCGCTGCTGTTAGGGTTAAGTTGAGTACAGGGTT 1145
Db 1095 GAAATCCAGAACGACCCGGTA--TCACTACAGAACATGCAAGAACATGCAAGAACAA 1151
QY 1146 ATCTACTGAGAACATGCTCTATCGSTATCCACCTTCTCGA 1190
Db 1152 CAATGGTACGATGCTGCTGCTGCGTTCCACCTTCACAAATGAA 1196

RESULT 3
US-09-910-186a-7.rn1
; Sequence 22, Application US/08405496A
Patent No. 591965
GENERAL INFORMATION:
APPLICANT: WILLIAMS, JAMES A.
TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
TITLE OF INVENTION: NEUROTOXIN
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94104

COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 08/405,496A
FILING DATE: 16-MAR-1995
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPHD-0130B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 1330 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1314
US-08-405-496a-22

Query Match

Best Local Similarity 19.6%; Score 263; DB 2; Length 1330;
Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;

QY 15 CAACAAATACATTCGAAATCTCTGAGAACCTGCGTTACAAAGCAA 74
Db 24 CACTGAAATACATCAAGAACATCATCACATCTCCACCTGAACTCTGCGCTACGAA 83
QY 75 CAACTGATGCTCTCTGTTAGGGTTAAGTTGAGTACAGGGTT----- 129
Db 84 TCACCTGATGACCTGCTCTGCTACCTTCACATCACATCGTCTAAAGTTACTT 143
QY 130 -GAAGCTGATGACAGAACGAGTCACAGGACTCTGACCTTCTCGTTACTCTAAGATGCCGTT 188
Db 144 CGATCCGATGACACATGATGCTCTGCTACGTTCACTGAA 203

QY 130 -GAACGTGATCACAGAACCGTCAACTGACCTCTCCGCTAACTTAAGATCCGT 188
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 144 CGATCCGATGACAGAACGATCAGATCCAGGTTCTCCAAATCGAGT 203
 QY 189 TACTCAGATCAGAACATCATCTTCAACTCGTAACTCGTAACTCGT 248
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 204 TATCCTGAGATGCTGTACACTCTATGAGAACCTCTCCACCTCTG 263
 QY 249 GATTGATGCCGAATACTAGAAGAGACCGTATCGAGATACATCCGATGATCAC 308
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 264 GATCCGATTCGGAAATCTCAGTCCACCTCGTCTGTTCTCTG 314
 QY 309 CATCATGACTCGTGGAGATAATCTGCTGGAGATCTCTCCCGTAACTCGT 368
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 315 CATCATGACTCGTGGAGATAATCTGCTGGAGATCTCTCCCGTAACTCGT 374
 QY 429 CCTGAAAGACATCTGATCATCATCATCTCTGGTCTCTGTACCATGACATAA-- 485
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 435 GATGATCACACTCTGACTCATCATCATCTCTGGTCTCTGTACCATGAC 428
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 QY 486 CCTGAAAGACATCTGATCATCATCTGCTGGTAAATGGATCTATACCGACATCAAGA 545
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 495 TCTGAAATRACTCGAAACATCAGTACGACGGCGCTGATGACCGAACCCTCAA 554
 QY 545 CATCCGTAAGATATGCTTAAGTACATCATCATCTCTGGTCTCTGTACCATGAC 494
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 555 TCTGGGTACATCACCGCTCTAAATACATCATGTGACCTGGGGTGTCTGAC 614
 QY 606 TACCCAGTCATCTGGTAATACTCTCCATCTCAACACCGACTCTCGTCAAG 665
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 615 TACCGCTACATCTGGTACATCATCTCAACTGCGGACATCTCAACTGCGGACATGAC 605
 QY 666 TATCGAAAGCGTACAGATCCAGTCTACTCCGATACTCTGAAGAGTTCTGGGTA 725
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 675 AATCAAAACGCTGACGACGACTCTGGTATCTGGTAAAGACGCTCTGGGTA 734
 QY 726 TCCCTGATGATCACAGAGACTACTTGTCTGACGAGAACTCTTACT 785
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 735 CTACTGGAGTAGACGACGACCGTACTCATCTGATCTGATCTGACGATCC 794
 QY 786 CARACTGAGAAAGCTCTCCGTTGTAATCCGATCTGTTGACGACGCTCTGGGTA 845
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 795 TGAGTCACAGTAGGTATCGGGTATCTGACCTGAAAGTCCGGTCTCTG 854
 QY 846 CTCGAAATACATCAGTACCTCCGGGACCTTGATCGTAAAGTTCATCCGTTGCA 905
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 855 TATGACTACCAACATCTCTGACTCTCCGTTGACGACGCTCTGGTAACTCATC 914
 QY 905 ATCTAATCTCACGCCAACATGATGACATCTACATTAAGAAGACTACATCTG 965
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 915 GAAATACCGCTGTTGTAACAGGACAATATCGTTGCGACATGATGTATAC 974
 QY 966 CTCTCAACCTGATCAGGAACTGGCTGTATCACCTACAGTACTTCAGAAGAAGA 1025
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 975 TGTGTTGATGAAACAAAGAACCTCTGCTGTTGACGCTCTGGTAACT 1094
 QY 1026 AGAAAAGCTTCTGGTCCGATCTGATTCCGAGACTCTACACCATCCAG 1085
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 1035 AAAGCTCTGCTGCTGAAATCCGGACGCTCTGGTAACTGTCGTCAGG 1190
 QY 1086 CAAGAAATACGACGAACTGCGACCTACTCTGCCAGCTGCTGTTGAGAAGATGAGA 1145
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 1095 GAATCCGAGACGACGGGTA--TCACTACAAATGCAATGATCTGCAGGCAA 1151
 QY 1146 ATCTACTGAGAAATCGCTGTGCTGAACTCCACCGTTCTACGA 1190
 ||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 Db 1152 CAATGTTAAGATATCGGTTCATCGGTTCCACCGTCAACAA 1196

RESULT 5
 US-09-910-186a-25
 Sequence 25, Application US/08480604A
 Patent No. 5736139

GENERAL INFORMATION:

APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.

APPLICANT: RADHYE, NISHA V.

APPLICANT: FIRCA, JOSEPH R.

APPLICANT: STAFFORD, DOUGLAS C.

TITLE OF INVENTION: VACCINE AND ANTI TOXIN FOR TREATMENT AND

PREVENTION OF C. DIFFICILE DISEASE

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL, LLP

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY DISK

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08480604A

FILING DATE: 07-JUN-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/422,711

FILING DATE: 14-APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496

FILING DATE: 16-MAR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791

FILING DATE: 02-DEC-1993

ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.

REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPID-01763

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEO ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 1402 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

FEATURE:

NAME/KEY: CDS

LOCATION: 1..1386

US-08-480-604A-25

Query Match

Best Local Similarity 53.9%

Pred. No. 2 6e-66

Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;

Query 15 CAACAAATCAATCCGAAATCTGACAAATCACCTGAACTCGTGTACAAAGACAA 74

Db	96	CACTGAAATCAGAACATCATCAACTCCATCGAACCTCGCGCTACGAATCCAA
QY	75	CAATCGATGATCTGCTGGTTAGGGTCAAGTAAGTGTAAAGATAACCGGTT-----
Db	155	TCACTGATGACCTGCTGGTTAGGGTCAAGTAAGTGTAAAGATAACCGGTT-----
QY	130	-GAACTAAGAAGACAGAACGGACTCTGCGAGCTAACTGACCTCTCGGTAACTCTAGATCGGT 188
Db	216	CTGATGATGACAGAAATGAGATGAGTCAGCTGGTCACTGGAATCTCCAGATGAGT 275
QY	189	TACTCGAACTAGAACATCTCTCACTCCGATTCTGTGACTCTGTGTCCTG 248
Db	276	TATCCGGAAGATGCTATCCCTATACAGCTCTGAGTACGAAACTTCTCCACCTCTGT 335
QY	249	GATTGATTCGAATACAGAACAGGAGGGTACAGATACATCCACAGAACTACAC 308
Db	336	GATCCCTATTCGAAATACCTCACTTC-----ATCTCTGTCGACGAACTACAC 386
QY	309	CATCATCACTGCATGAGATACTCTGGTGGAGATCTCCATCGCGGTTACCGAT 368
Db	387	CATCATCACTGCTGATGAGAAACATCTCTGGTGGAAAGTATCTGTGACTAGGTGAAT 446
QY	369	CATCGGACCTGATGATGATCAACGGTAGACGAATACATCCACAGAACTACAC 428
Db	447	CATCTGAGACTCTGAGGACACTCTGGTACATGAGAAACACAGGGTTACCTCACAACT 506
QY	429	CGTGGAGAACTCTGAAATACATACATGATGCTGCTGTTACCTCACAACTACCTCA 485
Db	507	GATGATCAAAATCTGACTACATCAATGCTGTTACCATCACAACTACATCG 566
QY	486	CCTGAAACATCTAAATCTACATGACCGTTAACTGGTAACTGGTAACTAATCCGACATCAAA 545
Db	567	TCTGAAATACCTCAAATCACAATCAACGGCGCTGATGACGAAACGATCTCAA 626
QY	546	CATCCGTTGAACTTATGCTAACGGTGAANTCATCTTCACAACTGACGGTGTACATCG 605
Db	627	TCTGGGTAACATCCACGCTCTAACTACATCTGTTACCTCACATGACGCGTTGCTGAC 686
QY	606	TACCCGTTCTACCTGATGAACTTCTCCATCTCACACCGGAACGTTCTCAGTC 665
Db	687	TCACCGCTACATCTGGTACATCAACTCTCACTGTCGACAAAGACTGACCAAAAGA 745
QY	666	TATCGAGAAAGGTCACAGTCAGCTACTCGAAACTCTGAAACTCTGGSTAA 725
Db	747	ATCCAGAACGCTGTAGCACACCAGCTCCATTCCTGGTAAAGTGCTGGTGAAC 806
QY	726	TCCGCGTGTACACCAAAGGAACTATGTCATCTGTTACAGAAGACTCTACAT 785
Db	807	CTACCTGCGATGACCTGACAAACGTTACTACAGCTGATCTGTTACAGAAGACTCTACAT 866
QY	785	CAACTCGAAGAAGACTCTGGTGGAACTCTGACTCTGCGTCAATACACAGAA 845
Db	867	TGAGCTCAACATCTGGTATCCGCGGTACATCTACCTGAAAGTGGTCTG 926
QY	846	CCTAAATCATCACTACCGCGACTCTGACATCTGAAATTCTCATCGTCCAA 905
Db	927	TATGACTACACATCTACTGTAATCCGCGGTACATCTACCTGAAAGTGGTCTG 986
QY	906	ATCTACTCTGCTCATGATGACATCTGACGAACTCTGACATCTGAAAGTGGTCTG 965
Db	987	GAATAGCGCTGGTAACTGGGAACTCTGACATCTGAAAGTGGTCTG 1046
QY	966	CTCTTCACCTGTAACGATGGGGTATACCTCAAGTACTCTCAAGAAGAGA 1025
Db	1107	AAAGATCTGCTGCTGGAACTCCGGCGTGTAACTCTGTCAGGTACTCTGAA 1166
Db	1047	TCTTGTGAGTAAAGAACAAATACTCGTCGGCACCAGTCTCTGTCAGGCTGGTGA 1106
QY	1026	AGAAACCTTCTCTGCTCGATCTGATGTCGACGACTCTACAAACCCATCAGAT 1085
QY	1107	AAAGATCTGCTGCTGGAACTCCGGCGTGTAACTCTGTCAGGTACTCTGAA 1166
Db	1086	CAAGATACGAGAACAGGGACCTACTCTGCGAGCTCTGCGAGCTCTGTCAGGCTGGTGA 1145
QY	1167	GAATCCGAGACGACGAGGAA---TCATRACAAATGCAATGAACTGGAGGAA 1223

RESULT 6
US-08-405-496A-25
; Sequence 25, Application US/08405496A
; Patent No. 5919665
; GENERAL INFORMATION:
; APPLICANT: WILLIAMS, JAMES A.
; TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/405,496A
; FILING DATE: 15-MAR-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/3229,154
; FILING DATE: 25-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,907
; FILING DATE: 02-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/985,321
; FILING DATE: 04-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/429,791
; FILING DATE: 31-OCT-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: INGOLIA, DIANE E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPFD-01308
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 397-8110
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1402 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1386
; US-08-405-496A-25

Query Match 19.6%; Score 263; DB 2; Length 1
Boss Local Similarity 53.9%; Pred. No. 2..6e-66;
Matches 639; Conservative 0; Mismatches 525; Indels 1
QY 15 CAACAAATACAGTCGGAAATCCTGACAATATCATCTCCGAACCTGGGTAA
Db 96 CACTGATGATCACAGAACATCATCACTCCATCTGCACCTGGCTA
QY 75 CAATCTGATGATCGATCTGGTTACGGCTAAAGTGAATGAGCTACGACGG
Db 156 TCACTGTGATGACTGTCCTACCCCTGCAAAATCAGATCGTCTAA

402;
21; Gaps 4;
CAAGACAA 74
| | | ||
CGGATCCAA 155
TGT--- 129
|||
AAGTAACCT 215

QY	-GAATCTGAAATCAGAACGCCAGTCACCTCAACTCCATTCTGGACTTCCTGTTCTCG	130
Db	TACTCGAATTCAGACATCATCTCACTCCATTCTGGACTTCCTGTTCTCG	216
QY		216
Db	GATCGTATCCGAAATCTCACTCCATTCTGGACTTCCTGTTCTCG	189
QY		189
Db	TATCCTGAAAGATCTGTATACTACCTGTTCTGAAACTCTGTTACATGAACTCTCCAC	276
QY		276
Db	GATGGTATCCGAAATCAAGAGACGGGTTCCAGATTACATCCACAGATAAC	249
QY		249
Db	GATCGTATCCGAAATCTCACTCCATTCTGGACTTCCTGTTCTCG	336
QY		336
Db	CATCATCACTGCTGAAAGATAACTCTGGTGGAAGATCTCATCGCGGTAACCGT	309
QY		309
Db	GATCATCACTGCTGAAACATCTGGTGAAGTCTCTGAACTCTGAACTAC	387
QY		387
Db	CATCTGGACTCTGATCGATTCACCGTAAGACCAAATCTGTTCTGAACTACAT	369
QY		369
Db	CATCTGGACTCTGAGACACTCTGGTGAAGTCTCTGAACTACAT	447
QY		447
Db	GATGATCACTACATCTGACTACATCACTGAACTCTGAACTACATCACCAAA	429
QY		429
Db	GATGATCACTACATCTGACTACATCACTGAACTCTGAACTACATCACCAAA	507
QY		507
Db	CCTGAACTATGCTAAATCTACATCAACGGTCTCTGATCAGAACGGATCICCAA	486
QY		486
Db	TCTGAACTACTCCAATCTACATCAACGGGCTCTGATCAGAACGGATCICCAA	567
QY		567
Db	CATCCGTAACTCTGCTTACGGTGAATCATCTGAACTCTGAGGTGACATGATCG	546
QY		546
Db	TCTGCTGAACTACTCTGATGAACTCTGATCTGAACTCTGAGGTGACATGATCG	627
QY		627
Db	TACCGGTATCTGTGAAATCTCTGCTTACATCGATCTGAACTCTGAGGTGACAC	606
QY		606
Db	TACCGGTTATCTGTGAAATCTCTGCTTACATCGATCTGAACTCTGAGGTGACAC	687
QY		687
Db	TATCGAGAACTGGTACAGTCTCAGTCTACTCGAAATACCTGAAAGACTCTGGGTAA	666
QY		666
Db	ATCAAGAACCTGTAGCAGAACCTGCTTACATCTGAAAGACTCTGGGTAA	747
QY		747
Db	TCCGCGATGATCACAAACAAATCTATGTCATCTGTTACACAGAACTCTCAT	726
QY		726
Db	CTACCTGCGATGACAAACCGIACATACATGCTGATCTGTTACATCCGAAACATAGT	807
QY		807
Db	CAACTGAGAAAGACTCTCGGGTGGGAAACCTGACTCTGTTCTGTTCCAAATCACCGAAA	786
QY		786
Db	TGACGTCACATGTTAGTATCCGGGTTACATGTACCTGAAAGTGGCTGGTCTGT	846
QY		846
Db	CTCTAAATCATCACTACCGGACTCTGACATGGTAAAGTCTCATCGCGCAA	927
QY		927
Db	TATGATCACACATCTACCTGAACTCTACCGGTTACCGGTTACATCATCAA	905
QY		905
Db	ACTAACTCTGTCATGATGACATGACCTGCTGTTAGAGAACTACATCTACTGGA	986
QY		986
Db	GAAATAGCGCTCTGGTACACAGGAAATCTGTTACATGAACTCTGTTACATCAA	987
QY		987
Db	CTCTGCACTGATCAGGATGGGGTATACCTCTACAAAGTACTCTGAAAGAGA	1047
QY		1047
Db	TGTTGTTAGTAACTGAAATACCTGCTGGTACCTGTTACAGTCTCTGTTACGAGTGTGAA	1026
QY		1026
Db	AAGATCTGCTGTGAAATCCGGCGTGTAACTGTTACCTGTTACAGTGTGTTAAAT	1107
QY		1107
Db	CAAGAATACCGACGACGCGACCACTCTGCGAGCTACTCTGCGTTCTGTTCAAGAAGATGAGA	1086
QY		1086
Db	ATCTACTGAGAACTCTGCTGTTACATCGGTTCCACCGATCACAAC	1146
QY		1146
Db	ATCTACTGAGAACTCTGCTGTTACATCGGTTCCACCGATCACAAC	1224
QY		1224
Db	ATCTACTGAGAACTCTGCTGTTACATCGGTTCCACCGATCACAAC	1268

RESULT 7
US-08-915-136-25
; Sequence 25, Application US/08915136
;
; PATENT NO. 6290960
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: TRAILER, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FIRCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915,136
FILING DATE: 08/08/1995
CLASSIFICATION:
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 08/480,504
FILING DATE:
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/405,496
FILING DATE: 16-MAR-1995
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1999
ATTORNEY /AGENT INFORMATION:
NAME: INGLOLA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPHD-01763
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 1402 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1386
US-08-915-136-25
Query Match 19.6%; Score 263; DB 4; Length 1402;
Best Local Similarity 53.9%; Pred. No. 2.6e-55;
Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4

Db 96 CACTGAATACATCAAGAACATCATCATACATCCATCCTGACCTGGCTACGAACTCAA 155
 Qy 75 CAATCTGTGATCTGCCTGGTTACCGTCTAACTTGAAAGTATACGAGGGT----- 129
 Db 156 TCACTGTGATCGACCTGTCTCGCTACGCTTCAAAATCACATCGTTCAAGTAATT 215
 Qy 130 -GAATGTGATGACGAGAACAGTCACACGACCTTGCTTAACCTGAGAAGCTG----- 188
 Db 215 CGATCCGATGACAAGAACATCCGACTACGCTGATCTCCAAATCGAAGT 275
 Qy 189 TACTCAGATCACACATCACCTCACCTCACCGTATCTGACTCTGACTCTGCTTC 248
 Db 276 TATCCTGAGAATGCTAAGTAACTCTGACTCTGACTCTGAGAAACTCTCCACCTCG 335
 Qy 249 GATTCGTATGCCGAAATACAGAGACGAGGGTACAGAAATACATCCACATGATAAC 308
 Db 336 GATCGTATGCCGAAATACCTCTACCT-----ATCTCTGACATGAACTACAC 386
 Qy 369 CATCGGACCTCTGATGATGATCACGGTAAAGCAAACTCTGATTCGATACACAT 428
 Db 447 CATCGTGGACCTCTGAGGAACTCTGAGGAAATCAACAGGGTGTGTTACATCTCA 506
 Qy 429 CGGTGAGCATCTGAGGAACTCTGAGGAAATCAACAGGGTGTGTTACATCTCA 368
 Db 387 CATACTACATGCTGAGAACATCTGTTGAAGTATCTGAACTACGGTGAAT 446
 Qy 394 GATTCGTATGCCGAAATACCTCACCTCACCTCACCTCACCTCACCTCACCTCAC 482
 Db 507 GATGAACTACATCTGAGTATGCTCACGGTAAATCATCTCACACGCGGTGACATCTCA 566
 Qy 486 CCTGACAACTCTAAATCTACATCAACGGTAACTGGAATCTGATCTAACCTCAA 545
 Db 567 TCTGAAATACTCCAAATCTACATCAACGGCGCTGTGACCTGACATCTCA 626
 Qy 546 CATCCGTGAGTATGCTCACGGTAAATCATCTCACACGCGGTGACATCTCA 605
 Db 627 TCTGGGTAACTCCACGGCTCTAAATACATCAACGGTAACTGACCGTGTGTCAC 686
 Qy 606 TACCCAGTCATCTGGATGAAATCTCTCCATCTCACACCGAACATGCTCAGTCAA 665
 Db 687 TACCCGCTACTCTGATCAATCTCTGATCAATCTCTGATCTGTTGACAAAGAAAGA 746
 Qy 666 TATCGAAAAGCTGAGATOCAGTCCTACTCCGATACCTGAGAGACTCTGGTAA 725
 Db 747 AATCAAAGACCTGAGAACCTGACCAACGACTCCATCTGATCTGAAAGCTTCGGGAG 805
 Qy 726 TCGCTATGTCGACAAAGAGATACTATAGTCTCATGCTGGTAAACAGAACCTGAT 785
 Db 807 CTACCTGGAGTACGACAAACGGTACACATCTGATCTGATCTGATCTGATCTG 866
 Qy 786 CAACTGAGAAGAGACTCTCGGTGGTAAATCTGATCTGATCTGATCTGATCTG 945
 Db 867 TGACGTCAACAAATGTTAGGTATCTGGGTATCATGATCTGATCTGATCTG 926
 Qy 846 CTCTAAATACATCAACTCCGGACGACTCTGATCTGATCTGATCTGATCTG 905
 Db 927 TATGACTACACATCTGATCTGATCTGATCTGATCTGATCTGATCTGATCTG 986
 Qy 906 ATCTAACTCTGCTCTCATGATGATGATGATGATGATGATGATCTGATCTGATCTG 985
 Db 987 GAATACCGTCGTTACAAAGACATATGTTGCTGACATATGATGCTGATCTGATCTG 1046
 Qy 966 CTTCCTCACTCTGATCTGAGATGGCTGTATACCTACAGTACTCTGAGAAGAGA 1025
 Db 1047 TGTGTTGATGATGAAATCCCGACGCTCTGATCTGATCTGATCTGATCTGATCTG 1106
 Qy 1026 AGAAAGCTTCTGGCTCGGACTCTGATGATGAGACGAACTCTGACATCTGATCTG 1085
 Db 1107 AAAGATCTGCTGCTGCTGAAATCCCGACGCTCTGATCTGATCTGATCTGATCTG 1166
 Qy 1086 CAAGGAACTGACCCGACGCTACTCTGCTGAGCTGCTGATCTGATCTGATCTG 1145
 Db 1167 GAAATCCAGAACGACCTGGTAACTACATGATGATGATGATGATGATCTGATCTG 1223

Qy 1146 ATCTACTGACGAAATCGGCTCTGATGCGGATTCACCGGTTCTACGA 1190
 Db 1224 CAATGGTAACTATCGGTTACATCGGTTCCACCAAGTCACAA 1268

RESULT 8

US-07-618-312A-3

; Sequence 3, Application US/07618312A

; Patent No. 5385540

; GENERAL INFORMATION:

; APPLICANT: Makoff Dr. Andrew J

; APPLICANT: Romanos Dr. Michael A

; APPLICANT: Clare Dr. Jeffrey J

; APPLICANT: Fairweather Dr. Neil F

; TITLE OF INVENTION: VACCINES

; NUMBER OF SEQUENCES: 13

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: 14th Floor

; STREET: 2200 Clarendon Boulevard,

; CITY: Arlington,

; STATE: Virginia

; COUNTRY: U.S.A.

; ZIP: 22201

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/07/618,312A

; FILING DATE: 19910116

; CLASSIFICATION: 424

; PRIORITY APPLICATION DATA:

; SYSTEM: GB 8926832.0

; APPLICATION NUMBER: GB 8926832.0

; FILING DATE: 28-NOV-1989

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: GB 9006097.1

; TELEPHONE: 0101 703 8750400

; ATTORNEY/AGENT INFORMATION:

; NAME: Crawford Mr. Arthur R

; REGISTRATION NUMBER: 25,327

; REFERENCE/DOCKET NUMBER: 510-51

; TELECOMMUNICATION INFORMATION:

; LENGTH: 1359 base Pairs

; TELEFAX: 0101 703 5233468

; TELEX: 200797 NIXN UR

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1359 base Pairs

; TYPE: NUCLEAR ACID

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

; HYPOTHETICAL: NO

; ANTI-SENSE: NO

; ORIGINAL SOURCE:

; ORGANISM: Clostridium tetani

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..1356

; US-07-618-312A-3

; Query Match: 9.8%; Score: 131.4; DB: 1; Length: 1359;

; Best Local Similarity: 47.6%; Pred. No.: 2.8e-28;

; Matches: 633; Conservative: 0; Mismatches: 636; Indels: 60; Gaps: 6; ▾

; Qy 40 AACATATCATCTGACCTCGGTCGATGCTGATCTGATCTGATCTGATCTG 99
 Db 58 AACATCTACATCTGACTCTGACATCACACGATATCTCGACATCTCGGTT 117
 Qy 100 GGTGCTAAAGTGAATGACGATGATGACGAGCTGATGATGATGATGATCTG 159

Db	118	AACCTCTCTGTTATCACATACTCAGATGCTTAATGGTGGGGGATCACCGGAAGGT	177
QY	160	ACCTCTCCGCTAC-----TCAGATGCCGTTACTCGAATGAGACATCATC	210
Db	178	ATCCACCTGTTAACAGAACATCTTCGAAAGTATCGTGCAAGGCATGACATCGAA	237
QY	211	TCAACTCGGATCTCGGACTCTCTGTTCTCTGATTCGATTCGGATCCGGAAATACAG	270
Db	238	TACAAACGACATGTCAACACTTCACGGTTGCTTCGCGGTTGCGAAGATTCT	297
QY	271	AACGAGCGTATCCGAATACTACATCACATGATGATACACATCATCAACTCGGAGAA	330
Db	298	GCTCCACCTGGACAGTACGGACTAACGAGTACTCCATCATCATCAGCCTATGAGAA	337
QY	331	AA-----CTCTGTTGAAAGACATCCATCCCGGTRACCCATATCATCGG	375
Db	358	CACTCCCTGTCATCGGCTCTGGTTGGCTTCCTGAAGGTAACAACTGATCTGG	417
QY	376	ACTCTGATCGATTAACGGTAAGACAACTGTAATCTGAACTACACATCGGAA	435
Db	418	ACTCTGAAAGACTCGCGCGGAGTGTGTCAGATCATCTCCGCGACCTCCGGACAAG	477
QY	436	GACATCTCAGATACATCACATCGCTGTTCTGTCATCACAC - CAAATACTGAC	492
Db	478	TTCAAACGGTACACGGCTAACAAATGGTTTCATCATCACTACATACGATGCTGCT	537
QY	493	ATGCTAAATCTACATCACAGGTAATCTGAGCTCATACGACATCAAGACATCCG	552
Db	538	TCTGCTAACCTGTCATCACAGCGCTGTGGCUCGGTGAATACATGCTGGC	597
QY	553	GAAGTWTCTTAACGGTAACTCTCCTAACACTGGAGGACATGATGTTGACCG	612
Db	598	GCTATCCGTSAGGACACACATCACTTAAGTGGACCGTGTGACACACACACAG	657
QY	613	TTCATCTGGTGAATACTCTCCTACATCTAACACCGAACGACTCTAGTCATATGAA	672
Db	658	TAGTATCCATGACAGATTCGATCTGAAAGACTGAGCTGAAAGAGATGAA	717
QY	673	GAACGGTACAGATCCAGTCACTGTTACTCCGAACTCTGAAAGATTCTGGGATATCGTG	732
Db	718	AAACTATATACAGTCACCTGCTACCTCTCGTGTGACTCTGGGAAACCGCTG	777
QY	733	ATGTAACAGAGATGATGATGATGATGATGCTGATGAGACTTATCATCACTG	792
Db	778	CTTAGAGACCGAAATATTCTCATCCGGTAGCTCTAGCTAAAGAGCTTCAGTG	837
QY	793	AGAAAGACCTTCGGTTGGAAATCCGACTGTTGCAATAACAAACAAACTCAA	852
Db	838	AAACATCTGACTGACTCTGACTGATCTGACCGAACCGCGCTCTACAGGTAACTG	897
QY	853	TACATCACTCCGGGACCTGATCGGAACTGAAAGTTCATCATCGGCAAATCPAC	912
Db	898	AAACATCTGACTACCGAGGTCTACACGGCTGAAATTCTACATCAACGCTACCTCG	957
QY	913	TCTCAGCTCATACTGATGATCTACGAAAGAGACTCTACTGTSACTCTC	972
Db	958	ACCAACGAAATCGATGATCTTGTAACTCGGTACTCTACATCAACTGTCATC	1017
QY	973	AACCTGATCAGGAATGCGCTGATACAC-----CTCAAGACTTCAGAAGAGAA	1026
Db	1018	ACACACGACGACACATCGTGTGACCGACCTACTCTGCAAGGAAACGCTTACACACTGAC	1077
QY	1027	GAAAGCTTCTGGCTCCGATCTGATTCGAGAACTCTACACCATCCAGATC	1086
Db	1078	AGATTCCTGCGGTGTTAACGTCGGTACCCCTGTCAGATCTGATGCTGATTC	1137
QY	1087	AAAGATAGGACGACAGCCGACCTACTCTGCAAGGAAACGCTTACACACTGAC	1146
Db	1138	GTTAACCTCGTGACCTGAAACACTACTCTGTCAGAACGCTGAGCAGAAAC	1197
QY	1147	TCTACTGAGGAATCGGCTGATCGCTATCCACCTTCGATCGTGTGTCAGAAGTGGACT	1206
Db	1198	GCTCTC-----TGGGCTGTTGGTACCCACAAAGGTOGATCGGTAAC	1242

QY	1207	GAGAAATACAAAGACTACTTCTGCATCTCCAAATGGTACCTGAGGAAGTTAACGCAA	1266
Db	1243	GACCCGAAACCGTGCACATCCGTACATCGCTTCAACNGTACTTCACCACTGAAAGACAA	1302
QY	1267	CGTACACCTGAACTGGTGTGCAATTGCGACGTCATGCCGAAGAGAGAGAGGTTGGACC	1326
Db	1303	-----ATCTGGTGTGCAACTGTTGACTGTTGTTGCGACCGATGAGGTTGGACC	1350
QY	1327	GATAGTAA	1335
Db	1351	AACGACTAA	1359

US-08-280-228-3

Query Match 9.8%; Score 131.4; DB 1; Length 1359;
 Best Local Similarity 47.6%; Pred. No. 2.8e-28;
 Matches 633; Conservative 0; Mismatches 636; Indels 60; Gaps 6;

QY 40 AACATATCATCTGAACTGGTTAACAGAACAACTGTATCGATCTGGTAC 99
 Db 58 AAGCTCTACATTCTGAACTGGTACACAGATATATCTCGACATCTGGTTC 117

QY 100 GGTCCTAAGTTCAGATACAGCTTACAGGTGTTAACGAGAACAGTCAC 159
 Db 118 AACCTCTTGTTACATATCGAGATCAGTCACTGGTACACAGATATCTCGACATCTGGTTC 177

QY 160 ACCCTCTCGCTAC-----TCTATAGCCGTTACTCTAGATCAGACATAC 210
 Db 178 ATCCACCTGTTAACAGAACATCTGTAAGTGTACGTCACAGAACATGAA 237

QY 211 TTCACTCGTATCTCGACTCTCTGTTCTCTGATGTTGATCCGAATAAGA 270
 Db 238 TACACGAGATGTCACAACTCACCGTATGCTCTGCTGCCTCGCGTTC 297

QY 271 AACAGCGTATCCAGATACTCCACATCACATCACITGCAAGAAT 330
 Db 298 GCTTCCACCTGGACAGTAGGACTAAGAGACTCTCCATCGCTATGAA 357

QY 331 AA-----CTCTGGTTGAGAGCTCOTACOGCGSTAACCGTATCATG 375
 Db 358 CACTCCCTCCATCGGCCCTCGTGTCTCCCTGGTAACTGACACCTG 417

QY 376 ACTGTGATGATCAACGGTAGACCAACTGTTATTCGATACATCGGAA 435
 Db 418 ACTCTGAAGACTCCGGGGGAGTTCTGTCAGATCACTTCCGGACCTGCGGAGA 477

QY 436 GACATCTTGATACATCACTAACGCGGTCTGTTACATCAG---CAATACCTGAC 492
 Db 478 TTCAACGGTACCTGGTTCACTACATCAAGGATCTAACGATCTCGCT 537

QY 493 AATGCTAAATCPACATCAAGGTAACTGAACTCTAACCGNACATCAAAGACATCGT 552
 Db 538 TCTGCTAACTGTACATCACACGGCGTCTGTATGGCTCCGCTGAAATCTGTCGGC 597

QY 553 GAAGTTACGCTAACGTTGAAATCATCTAACCTGGAGGGCATGGTACCG 612
 Db 598 GCTACCGCTGAGGACAACACATCACTCTTAAGCTGGACAGAACACACAG 657

QY 613 TTCACTCGTGTAACTCTCCATCTAACCGGAACTGTCTCATCCATGCA 672
 Db 658 TACGTATCATGACAACTGGTACATGAAAGACTCTGGGTAACTGGTAC 717

QY 673 GACGGTCAAGATCCAGCTTACCTCGGAATCTGAAAGACCTCTGGGTAACTGGTAC 732
 Db 718 AATCTGTTACCGACTCTGCTCATCACCTCCCTGGACTCTGGTAAACCGCTG 777

QY 733 ATGACACAGAACTATGTCATCTGGTAAAGAACCTACATCAACT 792
 Db 778 CGTGTACGACGACGAACTATCGTACGCCGTTGAACTGGTAC 837

QY 793 AAGAAAGACTCTCGGTTGTAATCTGACTCTGGTCAATACAGGAACTCTAA 852
 Db 838 AAAACACACTGACTGACTCATGACCTGGACACCGCGCTCCATCAACT 897

QY 913 TCTCAGTGTACATGAGACAGTCAGTACATCTGGACTCTTC 972
 Db 958 AACACGAACTGATGCTTGTAACTGGTAC 912

QY 973 AACCTGAACTGAGATGGGTATAC-----CTAAAGTACTCTGAGAAGA 1026
 Db 1018 AACACACAGACACATGTTGTTACCGAAGAGGGACGTTAACACCTGAC 1077

QY 1027 GAAAGCTTCTGGTCCGATCTGATTCGACACTCTAACACCATCCAGTC 1086
 Db 1078 AGATTCCTCGGTTGGTACACCGCCGACTACTCTGGCACTGTTGTCAGAACAAAGTGAAAGCT 1137

QY 1087 AAGAAATACGACCAACGCCGACCTACTCTGGCACTGTTGTCAGAACAAAGTGAAAGCT 1146
 Db 1138 GTTACCTCGTGTACCTGAAACTACTCTGTTGTCAGTGACGACAAAC 1197

QY 1147 TCTACTGAGAACCTGCTGATCGTGTACCCGTTCTACGATCUGGTACGTGATC 1206
 Db 1198 GCTTCCT-----TGGCTGGTGGACCCACAGGTCAGATCGTAC 1242

QY 1207 GAGAAATCAAGACTCTCTGCACTCCAACTGTTACTGACTGAGGTTAACCAA 1266
 Db 1243 GACCGAACCGTGTACACTGTCGTTACTGACTCTGACTCTGAC 1302

QY 1267 CCGTACACCTGAACTGGTCAATTGGCACTCATCCGAAGAGGAGGTGGCC 1326
 Db 1303 -----ATCCTGGTTGCGACTGTTACTCTGCTTCGACCACTGAAAGACHAA 1350

QY 1327 GAATGATGA 1335
 Db 1351 AACGACTAA 1359

RESULT 10

US-08-480-604A-27

; Sequence 27, Application US/08480604A

PATENT NO. 5736139

GENERAL INFORMATION:

APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.

APPLICANT: PADHYE, NISHA V.

APPLICANT: FIRCA, JOSEPH R.

APPLICANT: STAFFORD, DOUGLAS C.

TITLE OF INVENTION: VACCINE AND ANTOXIN FOR TREATMENT AND
TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL, LLP

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY diskCOMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/480,604A

FILING DATE: 07-JUN-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/422,711

FILING DATE: 14 APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496

FILING DATE: 16-MAR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/161,907

FILING DATE: 02-DEC-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/985,321

FILING DATE: 04-DEC-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791

FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.

REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPHD-01763

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 27:

SEQUENCE CHARACTERISTICS:

LENGTH: 3891 base pairs

FEATURE: NAME/KEY: CDS

LOCATION: 1..3888

US-08-480-604A-27

Query Match 9 2%; Score 123; DB 1; Length 3891; Best Local Similarity 50 2%; Pred. No. 1.3e-25; Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 ATATACATTCGAATCCATCACATATCATCTGAACTGGCTTAAAGAACACATC 79

Db 2603 AATATTTAGAATTAATTAACTCTCATATGAACTTGATGAACTAATCAT 2662

QY 80 TGATCGATCTGCTGTGTTAGGGTCTAA-----GTGAAGTAGATGAGGGTGTGAC 133

Db 2663 TATAGACTCTATCTAGTACATCAAAATAATATGTTGATGATGATGATTTATC 2722

QY 134 TGAATGACAGAACCTGGTAAACCTGGCTCTCGGCATCTACTCTAAATCCGTGTACTC 193

Db 2723 CAATAGATTAATCATCATCAATTAATTATTTAGAAGTAGATGATGATGATTTATC 2782

QY 194 AGAATGAGAACATCACTCAACTCGTATTCGGACTCTGTTCTCTGGATT 253

Db 2783 TAAAATGCTATTGTTATATGAAATTAGTACTGATCTGTTCTCTGGATA 2842

QY 254 GATTCGGAAATCACAGAACGGTATCAGATTACCTCCAAAGATCACATCGGT 313

Db 2843 GAATTCTTAATTTATCTAGATGATTAAT-----AATGATATCAAATA 2893

QY 314 TCACTCGATGAGATACTCTGTTGGAGATCTCCATCCGGGAAACGTATCTC 373

Db 2894 TAATGTTGAGAATATTCAGATGAAAGATCATCTTAATGTTGAAATACTC 2953

QY 374 GCACTCGATGATCAAGGTAAGACCAAATCTGTTCTGCAATACATCGGT 433

Db 2954 GGACTTTACAGATCTCAGAAATAAACAAAGAGTAGTTTAATCAGCAATGA 3013

QY 4334 AAGACATCTGATCATCATCTGCTGTCTGGTACCATACATCACCATAA---CTGCA 490

Db 3014 TTATATATCAGATTTAACAGATGATGTTGTAACACTACATTAATGATTA 3073

QY 491 ACAATGCTAAATCTACATCACGCTAACTGGATCTACCGCACATCAAGACATCC 550

Db 3074 ATACTCTAAATTATTAATGAGATAATGATCAAACCAATTCAATTAG 3133

QY 551 GTGAACTATGCTAACGGAAACATCTCAACTGCGACGATGACATGATGTCACC 610

Db 3134 GTATATCTAGCTATATATATGTTAATGATGGTTGAGAGATCACATA 3193

QY 611 AGTCATCTGGATGAACTCTCCATCTCACACCCAACTCTGCTGATATCG 670

Db 3194 GATATTTGTAATTAATTTAATCTTGTATAAGGATRAATGAAAGAAATCA 3253

QY 671 AGAAACCGTACAGATCCAGTCTACTCCATCTCACACCCAACTCTGCTGATCGC 730

Db 3254 AAGATTATGATGATCATCATCAATTCTAGTATTTAAAGACTTGTGGGATATT 3313

QY 731 TGATGACAAAGAGATACTATATGTTATGCTGTTAGAGAACACTTACATCAAC 790

RESULT 11

US-08-405-496A-27

Sequence 27, Application US/08405496A

; Patent No. 5919665

GENERAL INFORMATION:

APPLICANT: WILLIAMS, JAMES A.

TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL, LLP

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

ZIP: USA

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/405,496A

FILING DATE: 16-MAR-1995

CLASSIFICATION: 424

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791

FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.

REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPHD-01308

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 27:

SEQUENCE CHARACTERISTICS:

LENGTH: 3891 base pairs

FEATURE: NAME/KEY: CDS

LOCATION: 1..3888

US-08-405-496A-27

Query Match 9 2%; Score 123; DB 2; Length 3891; Best Local Similarity 50 2%; Pred. No. 1.3e-25; Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 ATATACATTCGAATCCGAACTATCATCTGAACTGGCTTAAAGAACACATC 79

Db 2603 AATATTTAGAATTAATTTAATCTCTTGTATAAGGATRAATGAAAGTAATC 2662

QY 80 TGATGATCTGCTGTTAGGGTCTAA-----GTGAAGTAGATGAGGGTGTGAC 133

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/915,136
 FILING DATE:
 CLASSIFICATION:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: 08/480,604
 FILING DATE:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLA, DIANE E.
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 795-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 27:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 3891 base pairs
 STRANDEDNESS: double
 TYPE: nucleic acid
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 1..3888

RESULT 12
 US-08-915-136-27
 ; Sequence 27, Application US/08/915,136
 ; Patent No. 6,280,960
 GENERAL INFORMATION:
 APPLICANT: KINK, JOHN A.
 APPLICANT: THALLEY, BRUCE S.
 APPLICANT: PADHYE, NISHA V.
 APPLICANT: FIRCA, JOSEPH R.
 APPLICANT: STAFFORD, DOUGLAS C.
 TITLE OF INVENTION: VACCINE AND ANTIOTOXIN FOR TREATMENT AND
 TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: floppy disk

Query Match 9.2%; Score 123; DB 4; Length 3891;
 Best Local Similarity 50.2%; Pred. No. 1.3e-25; Matches 396; Conservative 0; Mismatches 18; Gaps 3;

Db 3314 TACATGTGATAAACCTAGTATGTAATTATGATCCAAATTAATGTCGCG 3373
 Qy 791 TGAAGAAG 799
 Db 3374 TAATATG 3382

Db 2663 TAATAGACTATCTAGGTATGCATCAAATAATTGGTAGTAAGTAATTGTAC 2722
 Qy 134 TGAATGACAGAACGACTTCACACTGACCTTCCTCGCTAACTCTAACGATCCGTACTC 193
 Db 2723 CAATAGATAAAATGAAATCAATTCAATTATTAATTAGAAGTAGTAAATTGGTAAATT 2782
 Qy 194 AGAACTGAGACATCATCTTCACCTCCGATTTCTGGACTTCCTGTCTGGTAC 253
 Db 2783 TAAATAGCTATGTTATATGATGAAATTGACTGTTAGTACTGCTTGTGATA 2842
 Qy 254 GATCCCGATAACAGAAGACGGTATCGAGATTATCCACAAGATAACCCCA 313
 Db 2843 GAATTCCTAGTATTCACAGTAATGCTTAATTGAAATTGAGTAAATTGGTAAATT 2893
 Qy 314 TCACTGCATGAGATACTCTGGAGATCTCATCCGGTAAACCGTATCCT 373
 Db 2894 TAATGTGATGAAATTCACTGAGTAAATTGACTTAATTGATGAAATTACCT 2953
 Qy 374 GGACCTCTGATCGATATCACGGTAAGACCAAATCTGATTCCTCGATAACATCGTG 433
 Db 2954 GGACCTTACAGGATACTCGGAAATAACAAAGAGTAGTTTAATAGTCAAATGA 3013
 Qy 434 AAGACATCTGTGATACATCACTGCTGTTCTCGTACCCATCACAAATA--CCTGA 490
 Db 3014 TAATATATGAGTATTAATTAACAGATGGTTGACTCTACATAATAGATAAA 3073
 Qy 491 ACAATGCTAAATACACAAAGGTAACCTGAACTGAACTATACCGACATCAAGACATCC 550
 Db 3074 ATAACCTCTGATTAATTATTAATTAATGAAAGTAAATAGTAACTCAAAACATTCAATTAG 3133
 Qy 551 CTGAAAGTTACGCTAACGGAAATCATCTCAACCTGGACCGTGACATCGATCGTACCC 610
 Db 3134 GATATATTCAGTCAGTAAATATAATATGTTAAATTAGTGTGTTAGAGTACACATA 3193
 Qy 611 AGTCATCTGGATGAAATCTCTCCACCTTCACACGGAATGTCAGGCCAATATCG 670
 Db 3194 GATATATTGATTAATTATTAATGAAAGTAAATAGTAACTCAAAACATTCAATTAG 3253
 Qy 671 AGAACGGTACAGATCCAGTACTCCGAACTGAAAGACTCTGCGGTAATCGC 730
 Db 3254 AAGATTTATGATATCACTCAATTCAATTCACTGTTAGGTTAAAGACTTTGGGGATATT 3313
 Qy 731 TGATGACAGAACGAGATCTATGTCATGCTGGPACAGAACTCTCATCACAA 790
 Db 3314 TACATGTGATAAACCTAGTATGTAATTATGATCCAAATTAATGTCGCG 3373
 Qy 791 TGAAGAAG 799
 Db 3374 TAATATG 3382

US-08-915-136-27

Query Match 9.2%; Score 123; DB 4; Length 3891;
 Best Local Similarity 50.2%; Pred. No. 1.3e-25; Matches 396; Conservative 0; Mismatches 18; Gaps 3;

Db 2603 TAATATTTAAAATAATTATAATTAACTCTATATGAAATTGAGTAAATTGGTAC 2722
 Qy 80 TGATGATCTGCTGGTACGGTCTAA----GTGAAGTATGACGCGTGTGAC 133
 Db 2663 TAATAGACTATCTAGGTATGCTCAAATAATTGGTAGTAAGTAAATTGGTAAATT 2662
 Qy 134 TGAATGACAGAACGACTTCACACTGACCTTCCTCGCTAACTCTAACGATCCGTACTC 193
 Db 2723 CAATAGATAAAATGAAATCAATTCAATTATTAATTAGAAGTAGTAAATTGGTAAATT 2782
 Qy 194 AGAACTGAGACATCATCTTCACCTCCGATTTCTGGACTTCCTGTCTGGTAC 253
 Db 2783 TAAATAGCTATGTTATATGATGAAATTGACTGTTAGTACTGCTTGTGATA 2842
 Qy 254 GATCCCGATAACAGAAGACGGTATCGAGATTATCCACAAGATAACCCCA 313
 Db 2843 GAATTCCTAGTATTCACAGTAATGCTTAATTGAAATTGAGTAAATTGGTAAATT 2893
 Qy 314 TCACTGCATGAGATACTCTGGAGATCTCATCCGGTAAACCGTATCCT 373
 Db 2894 TAATGTGATGAAATTCACTGAGTAAATTGACTTAATTGATGAAATTACCT 2953
 Qy 374 GGACCTCTGATACACGGTAAACCCAACTCTGATCACATCGTAC 433

TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)

TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)

SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 5318
TYPE: DNA
ORGANISM: *Cryptosporidium parvum*
US-08-700-651-2

RESULT 15
-08-700-651-2 Sequence 2, Application US/08700651B
Patent No. 6015882
GENERAL INFORMATION:
APPLICANT: PETERSEN, CAROLYN
APPLICANT: LEECH, JAMES
APPLICANT: NELSON, RICHARD, C.
APPLICANT: GOT, JIRI
TITLE OF INVENTION: VACCINES, ANTIBODIES, PROTEINS, GLYCOPROTEINS, DNAs AND RNAs
TITLE OF INVENTION: FOR PROPHYLAXIS AND TREATMENT OF Cryptosporidium parvum
FILE REFERENCE: 480-19-4 (H)
CURRENT APPLICATION NUMBER: US/08700, 651B
CURRENT FILING DATE: 1997-08-14
EARLIER APPLICATION NUMBER: 08/415, 751
EARLIER FILING DATE: 1995-04-03

Search completed: November 1, 2002, 07:20:3
Job time : 84 secs

GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 07:17:28 ; Search time 56 Seconds
(without alignments)

7977.868 Million cell updates/sec

Title: US-09-910-186A-7

Percent score: 1341

Sequence: 1 gaattccatgtggccaaacaa.....ggaccgaaatgttaagaattc 1341

Scoring table: IDENTITY-NUC

Gapop 10.0 , Gapext 1.0

Searched: 310279 seqs, 166577418 residues

Total number of hits satisfying chosen parameters: 620558

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Sequence 7, Appli
Sequence 8, Appli
Sequence 4, Appli
Sequence 3243, A
Sequence 16440, A
Sequence 340, A
Sequence 342, A
Sequence 343, A
Sequence 345, A
Sequence 2072, A
Sequence 4012, A
Sequence 11, Appli
Sequence 28059, A
Sequence 195608, A
Sequence 2825, A
Sequence 3, Appli
Sequence 2074, A
Sequence 10, Appli
Sequence 9, Appli
Sequence 1682, A
Sequence 8722, A
Sequence 1550, A
Sequence 119, A
Sequence 228, A
Sequence 17051, A
Sequence 422, A
Sequence 1058, A

ALIGNMENTS

```
Published_Applications_NA:  
1: /cn2_6/pctodata/2/pubpna/us07_pubcomb.seq:<*  
2: /cn2_6/pctodata/2/pubpna/pct_new_pub.seq:<*  
3: /cn2_6/pctodata/2/pubpna/us05_new_pub.seq:<*  
4: /cn2_6/pctodata/2/pubpna/us06_pubcomb.seq:<*  
5: /cn2_6/pctodata/2/pubpna/us07_new_pub.seq:<*  
6: /cn2_6/pctodata/2/pubpna/pectus_pubcomb.seq:<*  
7: /cn2_6/pctodata/2/pubpna/us08_new_pub.seq:<*  
8: /cn2_6/pctodata/2/pubpna/us09_new_pub.seq:<*  
9: /cn2_6/pctodata/2/pubpna/us03_pubcomb.seq:<*  
10: /cn2_6/pctodata/2/pubpna/us05_pubcomb.seq:<*  
11: /cn2_6/pctodata/2/pubpna/us10_new_pub.seq:<*  
12: /cn2_6/pctodata/2/pubpna/us10_pubcomb.seq:<*  
13: /cn2_6/pctodata/2/pubpna/us60_new_pub.seq:<*  
14: /cn2_6/pctodata/2/pubpna/us60_pubcomb.seq:<*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the results being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match Length	DB ID	Description
1	1339.4	99.9	1341	10	US-09-050-756-2
2	736	54.9	3876	12	US-10-051-952-3
3	417	49.0	3876	12	US-10-051-952-2
4	263	19.6	1338	10	US-09-350-756-5
5	242.6	18.1	1313	8	US-08-981-078-A-6
6	7	242.6	18.1	1317	10
8	221.6	16.5	702	10	US-09-350-756-10
9	218.6	16.3	3894	12	US-10-051-952-9
10	160	11.9	1400	10	US-09-350-756-4
11	123	9.2	1327	10	US-09-350-756-9
12	119.8	8.9	4835	10	US-09-388-126-10
13	119.8	8.9	3891	12	US-10-051-952-1
14	105.8	7.9	1371	10	US-09-350-756-3
15	105.8	7.9	2452	10	US-09-350-756-7
16	96	7.2	1293	8	US-08-981-087-A-5
17	92.6	6.9	3831	12	US-10-051-952-5
18	85	6.3	1987	10	US-09-350-756-8
19	81.8	6.1	3753	12	US-10-051-952-6

```
RESULT 1  
US-09-350-756-2  
/ Sequence 2, Application US-09350756  
/ Patent No. US20020314521A1  
/ GENERAL INFORMATION:  
/ APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases  
/ APPLICANT: Peter Puslko  
/ APPLICANT: Michael D. Parker  
/ APPLICANT: Jonathan F. Smith  
/ APPLICANT: Mark T. Dertzaugh  
/ APPLICANT: John S. Lee  
/ APPLICANT: Peter Puslko  
/ APPLICANT: Michael D. Parker  
/ APPLICANT: Jonathan F. Smith  
/ APPLICANT: Mark T. Dertzaugh  
/ APPLICANT: Leonard Smith  
/ TITLE OF INVENTION: Botulinum Neurotoxin Vaccine  
/ FILE REFERENCE: 003-124/SAP RID 98-21  
/ CURRENT APPLICATION NUMBER: US-09/350,756  
/ EARLIER APPLICATION NUMBER: US 60/092,416  
/ EARLIER FILING DATE: 1998-07-10  
/ NUMBER OF SEQ ID NOS: 11  
/ SOFTWARE: Apple Macintosh Microsoft Word 6.0  
SEQ ID NO 2  
LENGTH: 1341  
TYPE: DNA  
ORGANISM: Artificial  
FEATURE:  
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"  
US-09-350-756-2  
Query Match 99.9%; Score 1339.4; DB 10; Length 1341;  
Best Local Similarity 99.9%; Pred. No. 0; Gaps 0;  
Matches 1340; Conservative 0; Mismatches 1; Indels 0;  
QY 1 GAATTCAGGATGCCAAATACTCGAAATTCTGCATAATCATCCGTACCTG 60  
Db 1 GATTCAGTGGCCGCACTTCCAAATCTGCATAATCATCCGTACCTG 60  
QY 61 CGTACAAAGACACAACTCTGATGATCTGCTGGTTACGGTCTAAAGTGAGTAC 120  
Db 61 CGTACAAAGACACAACTCTGATGATCTGCTGGTTACGGTCTAAAGTGAGTAC 120  
QY 121 GACGGCTGTAAGCTGATGACAGACCAGTCAAACTGACCTCTCCGCTTACTCTAG 180  
Db 121 GACGGCTGTAAGCTGATGACAGACCAGTCAAACTGACCTCTCCGCTTACTCTAG 180
```

121	GACGTGTTGAACTGAATCAAGAACCAZAGTAAACTGACTCTTCGGTAACCTAAG	180	QY	1261 CGCAAACCGTACACTGAAACTGGTTGCATTGGCGATTGGCTCATCCGAAAAGCAGAAGGT	1320
181	ATCCGTTGTTACTCAGAATCAAGAACATCATCTTCAACTCGTATTCCGTGACTTCGT	240	Db	1261 CGCAAACCGTACACTGAAACTGGTTGCATTGGCGATTGGCTCATCCGAAAAGCAGAAGGT	1320
181	ATCCGTTGTTACTCAGAATCAAGAACATCATCTTCAACTCGTATTCCGTGACTTCGT	240	QY	1321 TGGACCGATAAGTAAGAATT 134.1	
241	TCTCTTGATTCTGTATCCGAATACAGAARGACGGTATCCAGAATTAGATCCAAAT	300	Db	1321 TGGACCGATAAGTAAGAATT 134.1	
241	TCTCTTGATTCTGTATCCGAATACAGAARGACGGTATCCAGAATTAGATCCAAAT	300	QY	1321 TGGACCGATAAGTAAGAATT 134.1	
301	GAATACCACTCATCACCTCACGATGAAAGATAACTCTGGTGAAGATTCATCCGCGT	360	RESULT 2		
			US-10-051-952-3		
			Sequence 3, Application US/10051952		
			Patent No. US20020107199A1		
			GENERAL INFORMATION:		
			APPLICANT: Walker, Patricia		
			TITLE OF INVENTION: Methods of Administering Botulinum Toxin		
			FILE REFERENCE: 2933CIP		
			CURRENT APPLICATION NUMBER: US/10/051, 952		
			CURRENT FILING DATE: 2002-01-17		
			PRIOR APPLICATION NUMBER: 09/730, 237		
			PRIOR FILING DATE: 2000-12-05		
			NUMBER OF SEQ ID NOS: 12		
			SOFTWARE: Patentin Ver. 2.1		
			SEQ ID NO: 3		
			LENGTH: 3876;		
			Best Local Similarity: 72.2%; Pred. No. 3.5e-199;		
			Mismatches: 366; Indels: 0; Gaps: 955; Conservative: 1;		
			Query 10 ATGGCCACAAATAAACATTCCGAAATCTGTGACATATCATCTGAACTCTGGTTACAAA 69		
			Db 2554 ATGTTAAATAAAATAAAATAGCAGAAATTAAATAATCTTAAGATTAAGATTAAG 2613		
			Query 70 GACACAATCTGATGATCUGTGTACGGGCTAAAGTGAAGTATACACGGGTGT 129		
			Db 2614 GATAATAATTAAATAGATTATACAGATAATGGGTGAGGGPATATGCGAGTC 2673		
			Query 130 ACTCGTAATGCGAAAGAACCGTTCGAAACTCGACCTCTCCGGTAACCTCTAAGATCCGGTT 189		
			Db 2674 GAGCTTAATGATAAAATCATTAATAACTAGTCAAGTAATAGTTAGGTG 2733		
			Query 190 ACTCGTAATGCGAAACTCATCTTCGAACTCGTATTCTGGACTCTCTGTCTCTGG 249		
			Db 2734 ACTCAAAATCGAAATAACTCATATAATGTTAGGTGCTCTGTGTTGG 2793		
			Query 250 ATTCGATCCGAAATAACAGAACCGTATACATCCACAAATGAAATCACC 309.		
			Db 2794 ATAAGATAATCTAAATAATAAGATGTTGTTGAAATAATGTTAATATACTA 2853		
			Query 310 ATCATCAACTCGATGAGAAATAACTCGTATTCTGGGCTAACGGTACCGTATC 369		
			Db 2854 ATAATPAATTTGTTGAAATAATGTTGGGTAAATAGGTTAGGTAAATGATA 2913		
			Query 370 ATCTGGACTCTGATGCGATAACCGTAAACTGGTATTCTGGGTTAAATGTTGAATATACTA 2973		
			Db 2914 ATATGGACTTAATATAATATAATGAAATAACCAATCGTATTITGTTGAATATACTA 2973		
			Query 430 CGTGAAGACATCTGCTGAATCATCACCATGTTGCTGGTTCTGTTACCATACCAATACCTG 489		
			Db 2974 AGAGAAAGATAATCATGAGTTATAATAGGTGTTACTAATTAATTGTT 3033		
			Query 490 AACATGCTAAATAATCATCAACGTTAACCTGAACTCATGAACTC 429		
			Db 3034 AATAACGCTAAATAATCATCAACGTTAACCTGAACTCATGAACTC 549		
			Query 550 CGTGAAGTTATGGCTTACGGTAAATCATCUTCAACTGGACTGTACATCGTGTAC 609		
			Db 3084 AGGAAAGTTATGGCTTACGGTAAATCATGAACTCATGAACTGATGAGTAA 3153		

Query Match	Score	Length
Best Local Similarity	49.0%	3876;
Matches	68.4%	
Conservative	No. 9-8-17;	
Mismatches	420;	
Indels	0;	
Gaps	0;	
Qy	3 ATTACCATGGCAAAATAACAAATCCGAAATATCATCTGAAACTCTGAACTCTGG 62	
Db	2547 ATAAAATATTATAAATAGCGAAATTAAATCTTAATTATTAGTAAATTAGT 2606	
Qy	63 TTACAAAGCACACAAATCTGATCATTGTGTTACGGTCAAAGTGAGTATACCA 122	
Db	2607 ATATGAGATAATTATTTAGTTATAGGATATGGCAAAAGGTGAGGTATATA 2666	
Qy	123 CGGTGTTACTCGAAATCGAACGAACTGAACTCGTAACTCGTAACTCTGGACTCTCTGTGTTTC 182	
Db	2667 TGGGTCAGCTAATGATAAAATCAATTAACTAGTCAAGGAGATAAATAGT 2726	
Qy	183 CGGTGTTACTCGAAATCGAACGAACTGAACTCGTAACTCGTAACTCTGGACTCTCTGTGTTTC 242	
Db	2727 TAGTGACTCAAAATGAGATAATTATATAATATGTTAGCTTGATTAGCTGTAG 2786	
Qy	243 CTTCTGGATTCGTTATCCGAAATACAGAACGCGTATCCGAAATTACATCCACAATGA 302	
Db	2787 CTTTGGATAAGGATAACTCTAAATTAGGATGATAAAATTATCATATAAATA 2846	
Qy	303 ATACACATCAACTACCCGACCGTACATCGTGAAGGTACATCGTGCACAACT 909	
Db	3453 ATATATAAAATATAGAGATTATATGAGAAAATTATAGAAGAAAGTCA 3453	
Qy	910 AACTCTCAGTCATCATGAGACATCGTAGGTAAAGAACACTACATPACCTGGACTC 969	
Db	3454 AATTCTCAATCPATAATTGAGATAATGTTAGAAGGAGATTATATPATCATGATT 3513	
Qy	970 TCTACCTGAACTTACGGGATGGGTGATACCTAACAGGAACTTCAGAAGGAGAAA 1229	
Db	3514 TTTATTTAACATCAAGTGGAGTATACCTATATAATTAAAGAAGAAGA 3573	
Qy	1030 AGCTTTCCTGGCTCGATCTGATTCCGAGGAACTCTAACACCCATCAGTCARA 1089	
Db	3574 AAATGGTTTACCTGAGTCTTAAAGTGGAGTATAGTTAGAATACATAAA 3633	
Qy	1090 GAATACGAGCACAGCGGACCTACTCTGGCAAGCCTGCTGTCAGAAGGAAATCT 1149	
Db	3634 GAATATGATGAAGGCCAACATATGGTCTTAAAGGATGAGAAACT 3593	
Qy	1150 ACTACGAANCTGGCTGATCGTACCTGAACTCTGGTACACGAAACCC 1209	
Db	3694 ACTGATGAGATGGATGGTGTGGTCTAGGATCTGGAAATGTANTTGA 3753	
Qy	1210 GAATACAAAGCAACTCTGCACTCCTCAAATGTTACCTGAAAGGAAGTTAACGAAACCC 1269	
Db	3754 GAGTATAGAGTTATTTGGTAAATTAATGGTAAATGGTAAAGGAAACCA 3813	
Qy	1270 TACACCTGAAACTGGGTGCAATTGGCAGTCTACCCGAAAGGTTGGACGCAA 1329	
Db	3814 TATATTTPAATTTGGATGTTATGGCAGTTTACCTAAGATGAAGGGTGGACTGAA 3873	
Qy	1330 TA 1331	
Db	3874 TA 3875	
Qy	RESULT 3	
Db	RESULTS-10-051-952-2	
Sequence 2, Application US/10051952		
GENERAL INFORMATION:		
APPLICANT: Walker, Patricia		
TITLE OF INVENTION: Methods of Administering Botulinum Toxin		
FILE REFERENCE: 2933CIP		
CURRENT APPLICATION NUMBER: US/10/051,952		
CURRENT FILING DATE: 2002-01-17		
PRIOR APPLICATION NUMBER: 09/730,237		
PRIOR FILING DATE: 2000-12-05		
NUMBER OF SEQ ID NOS: 12		
SOFTWARE: PatentIn Ver. 2.1		
SEQ ID NO: 2		
LENGTH: 3,876		
TYPE: DNA		
Qy	963 GGACTCTCTAACCTGAAATCGGAACTCTCGGGTGAATACGACAACTACTTCAGAAGA 1022	
Db	2503 AGATTCCTTAACTTATAATTATGAAATTATGAGAAATTATTTAAGAACAA 3566	

2y	1023	AGAGAAAAGCTTTCCGGATCTGATTCGACCAACTCTAACACCATCCA	1082	Qy	239	TTTCCPTCTGGATTCGTATCCGGAAATAAGAACGAGGGTATCCAGAATTACATCCACA	298
Db	3567	GGRAAGAAAATGTTTATCTTATTAAGTATCTTAATAGATAGA	3626	Db	260	TCAACTCTGGTCTGGTACCCCAGAACACAAACGACCTAACGGTAAAGGAGA	319
2y	1083	GATCAAGAAATGCCAACAGCGGACTCTGCACTCTGGTCAAGAAGAGA	1142	Qy	299	ATGAAATACCATCTAACGATGAAATAACTCTGGTGAAGATCTCCATCGCG	358
Db	3627	AATRAAGAAATGTTGATGAAACGCCATATAGTGTCAATGTTAAGATGTA	3686	Db	320	ACGAGPACACCATCTCCTGTACARAAACGACTCCGGTTGAAAGTCTCATCAAAG	379
2y	1143	AGATACTACTGAGAAATGCCATCTGGTACCGGTTTCAGGAACTGGTATGT	1202	Qy	359	GTAAACGGTATCATCTGGACTCTGATGATCACGGTAAAGACAAATCTGATTCCTG	418
Db	3687	AGAAAGTACTGATGAGAAATGCCATCTGGTACCGGTTTCAGGAACTGGTATGT	3746	Db	380	GAACCGTATATCTGGTACCGGACTCTGATGCGTCAAGCTTCAAGTCTTCATTC	439
2y	1203	ATTGAGAAATCAAGACTACTTCGATCOTCCAAATGTTACCTGAAAGCTTAACG	1262	Qy	419	AATRACAAATCCGGTAAAGACATCTGAAATACATCAATGCTGCTTCGTTACACCA	478
Db	3747	ACGTAAAGTAAAGTAAAGTAAATTTTATAGTAAAGTGGTAAAGGAAAGA	3806	Db	440	AGTACCTCATAAAGGAAATCTCGGACTACATCAACZAGTGTCTCCATCACATCA	499
2y	1263	CACACGTAAACCTGAACTGAACTGAACTGAACTGGTCAATTCGGTCAAGCAGGGTT	1322	Qy	479	CCAATAC--CTGACAAATGCTAAATACTACATCAACCGTAAACTGGAAATCTAA	535
Db	3807	GAACACATATAACTCAAAATTGGATGAAATTCTTAAGATGAAAGGGTG	3866	Db	500	CCAACGACCGCTGGTAAACCCACATCATACATCAACGGTTCCTGAGAAGTCAGA	559
Qy	1323	GACCGATA 1331		Qy	536	ACATCAAAAGATACTGGTAAAGTTACCTGCTAACCTGAAACTGGCAGCTG	595
Db	3867	GACTGATA 3875		Db	560	AGATCCCTGAAACTGGACCGTATCAACTCCAACTGACTGACTGAGTGA	619
Qy				Qy	596	AGATCGATCTGGTACCCAGTTCATCTGGTAAATACTTCCATCTAACACGGAACTGT	655
Db				Db	620	GTACCGAACACCAACGAACTGGTCTGGTGGATCAAGGACTTCACATCTGGTGA	679
Qy				Qy	656	CTCAGTCCAAATGAGAAAGGTTCAAGATCCATCTTACTCGGAAATACCTCAAGACT	715
Db				Db	680	ACGCACRCGGGGTCTCTCCCTGTACTGATCTGGTCAAGCTTCCACAAACCCCTGAA	739
Qy				Qy	716	TCTGGGTAATCCGGTGTAGTAAACAAAGAAATCTATGTTGATGTTGTAACAGA	775
Db				Db	740	TCTGGGAAACCCACTGGTGTAGCACCCAGTACTCTGTCACCCAGTATGCGA	799
Qy				Qy	776	ACTCTTACATCAAATCTGGTAAAGACTCTCGGTTGGTAAATCTGACTCTGTTCA	835
Db				Db	800	ACATCTACATCAAGTACTCTGGTCAAGCCCTCCTGTCACAACT	859
Qy				Qy	836	ACAAACCGAAACTCTAAATACTCAACTACCGGAACTCTGTCACATGGTAAAGTCATCA	895
Db				Db	860	TCAACAAGGCCCC-----CATCAACTACCGAAACCTGTCACCTGGTCA	913
Qy				Qy	896	TCGGTGCQAATCTRACTC---TCACTCCATCAATGACATGTAAGTAAGAAGACT	952
Db				Db	914	TCAGGAAGGCCCTCAACTCCGGTAACATCAACGAAACATGTCCTGGTGT	973
Qy				Qy	953	ACATCTACCTGACTCTTCACCT---GATTCAGAATGGCGTGTAPACACCTCAAGT	1009
Db				Db	974	ACATCTACCTGAAACATCAGGAAACATCTCCGAGACTTCACCTGTCCTGGTCA	1033
Qy				Qy	1010	ACCTCAAGAAAGAAAGAAACCTCCGGTAACATCAACGAAACATGTCGAACT	1069
Db				Qy	1130	TCAAGAAAGATGAGAAATCTACTGAGAAATCGGTTTCTGGTCCAACTAACGGT	1189
Qy				Db	1034	ACTCAGGAGATGCAAGCCGACTCTTCACCTGGCCCAATCAAGACGCCCTAC	1207
Db				Db	1154	GCGAGAAAGACACAAACCCGAACTCTGGTCTGGTGGATCTGCTG	1249
Qy				Qy	1190	AATCTGGTATCTGATCTGCAATGCAATGGTAAAGACTCTCTGTCAGGCTG	1267
Db				Db	1208	ACTCGGTACTCTGGACACCTAGACAATGTCCTCTGTCATCCCTGTC	1267
Qy				Db	1250	AGGAAGTAAAGCCAAACCCPAAACTCTGAAACTGGTGCATCCGGAA	1309
Db				Db	1268	GTCGTATCTCCGAGAACATCACAGTCGCTGGTGGATGATCACCCAG	1327
Qy				Qy	1310	AAGAGGAAAGTTGGACCGA	1328

RESULT 4
US-09-350-756-6
Sequence 6, Application US/09350756
; Patent No. US2002003521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; CURRENT FILING DATE: 1999-07-09
; EARLIER APPLICATION NUMBER: US 60/092,416
; EARLIER FILING DATE: 1998-07-10
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
SEQ ID NO 6
LENGTH: 1347
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-09-350-756-6

Query Match Similarity 31.1%; Score 417; DB 10; Length 1347;

Best Local Similarity 60.3%; Pred. No. 9e-109; Mismatches 505; Indels 27; Gaps 6;

Matches 807; Conservative 0; Other INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"

US-09-350-756-6

Query Match Similarity 31.1%; Score 417; DB 10; Length 1347;
Best Local Similarity 60.3%; Pred. No. 9e-109; Mismatches 505; Indels 27; Gaps 6;
Matches 807; Conservative 0; Other INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-09-350-756-6

Qy 65 ACAAGACACAAATCTGATGATCTGGTACGGTCAAGTGTGAGTATGAGC 124.
Db 80 ACCGTTGTTGTCGTCGACTCCGGTACCATCAACGACTCTGGTTCCG 139

Qy 5 TCACTGGCCACAAATACAAATACAAATTCCGAAATCTGAAACAAATCATCTGAAACCTGCTT 64
Db 20 TCCAGTCATCAACAACTCCACATCTCCACATCTCCACATCTCCCT 79

Qy 125 GTGTGAACTGAAATGAC-----AAGAACCTGTCACACTGACCTCTCCCTAACTCTA 178
Db 140 ACGTATCTCAAGAACATGGTCAAGCTGGTACGGTCAAGTGTGAGTAACTCCGAA 199

Qy 179 AGATCGGTGTAACTCGAAATCAAGACATCTTCACACTCGTCACTCTGACTCTCG 238
Db 200 ACATCACCGCCACCAAGTCCAAAGTCCGTCGTCGACTCATGTCGACACTCTCA 259

RESULT 5

US-09-350-756-1
Sequence 1, Application US/09350756
Patent No. US200303521A1

GENERAL INFORMATION:

APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases

APPLICANT: John S. Lee

APPLICANT: Peter Pushko

APPLICANT: Michael D. Parker

APPLICANT: Jonathan F. Smith

APPLICANT: Mark T. Bertbaugh

APPLICANT: Leonard Smith

TITLE OF INVENTION: Botulinum Neurotoxin Vaccine

FILE REFERENCE: 003/124/SP RRD 98-21

CURRENT APPLICATION NUMBER: US/09/350,756

CURRENT FILING DATE: 1999-07-09

EARLIER APPLICATION NUMBER: US 60/092,416

EARLIER FILING DATE: 1998-07-10

NUMBER OF SEQ ID NOS: 11

SEQ ID NO 1

SOFTWARE: Apple Macintosh Microsoft Word 6.0

LENGTH: 1338

TYPE: DNA

ORGANISM: Artificial

FEATURE:

OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"

US-09-350-756-1

Query Match 19 6% ; Score 263; DB 10; Length 1338;
Best Local Similarity 53.9%; Pred. No. 5.3e-65%; Indels 21; Gaps 4;

Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;

QY 15 CAACAAATACTGGAAATCTGTGAAACAATTCATCCTGAACCTGTACAAAGACAA 74
DB 32 CACTGATATCACTGAAACATCATCATCATCCCTGACCTGGCTGCAATCA 91

QY 75 CAATCTGATGATCTGCTGGTACGGCTTAAGTGCGATATACGCGTTGTT --- 129
DB 92 TCACCTGATGATGACCTGTCGTCGATCGCTCCAAAATAACATGGTTCAAATCT 151

QY 130 -GAACGTAAATGACAGAAACCGTCAACTGACCTCTCGGTAACTCTAGATCGGTG 188
DB 152 CGATCGATGATGAACTGAACTGAACTGAACTGAACTGAACTGAACTGAACT 211

QY 189 TACTCGAATCAGACATCATCTCAACTCCGTTGACTCTCGTTCCCTCTG 248
DB 212 TATCCCTGAAATGCTATGTTACACTCTATGTTGAAAACTCTCCACCTCTCTG 271

QY 249 GATTCTTATCCGAAATACAAAGACGGTATCCGAAATTACATCCACAATGAAAC 308
DB 272 GATCCATATCCGAAATACCTCACTCC-----ATCTCTCTGAACTGAACTAC 322

QY 309 CATCATCAACTGATGAGATACTCTGGTGGAAAGATCTCCATCGGGTAACCGTAT 368
DB 323 CATCATCAACTGATGAGATACTCTGGTGGAAAGATCTGAACTGAACTGAACTAC 382

QY 369 CATCTGAGCTGTGATGATCACCGTAAAGCCTAACTCTGTTATCTCGGTAACAT 428
DB 383 CATCTGAGCTGTGAGACACTCGGAAATCAACGGGATCTGAACTGAACTGAACT 442

QY 429 CGGTGAGAGACATCTGATCACATGATCACATGATCACATGATCACATGAACT 485
DB 443 GATGATCAACATCTGAGCTACATCACTGGATCTGTTACATCACAACTGCACT 502

QY 486 CCTGAACTCAATCAATCTGAACTGAACTGAACTGAACTGAACTGAACTGAA 545
DB 503 TCTGAACTCAATCTGAACTGAACTGAACTGAACTGAACTGAACTGAACTGAA 562

QY 546 CATCCGTGAACTTACGGTAAATCATCTTCAAACCTGGGATCATCGATCG 605

RESULT 6

US-09-981-087A-6
Sequence 6, Application US/0981087A

Patent No. US20020081304A1

GENERAL INFORMATION:

APPLICANT: Elmore, Michael J.

APPLICANT: Mauchline, Margaret L.

APPLICANT: Minton, Nigel J.

APPLICANT: Pasechnik, Vladimir A.

APPLICANT: Titball, Richard W.

TITLE OF INVENTION: Type F BOTULINUM TOXIN AND USE THEREOF

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: NIXON & VANDERHYE P.C.

STREET: 1100 NO. US20020081304A1th Glebe Rd.

CITY: Arlington

CITY: Arlington

COUNTRY: USA

COUNTRY: USA

ZIP: 22201-4741

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/981,087A

FILING DATE: 27-MAY-1998

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/GB96/01409
 FILING DATE: 12-JUN-1996
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: GB 95111909.5
 FILING DATE: 12-JUN-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: Crawford, Arthur R.
 REGISTRATION NUMBER: 25,327
 REFERENCE/DOCKET NUMBER: 124 - 688
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 703-816-4000
 INFORMATION FOR SEQ ID NO: 6:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1313 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 S-08-981-087A-6

Query Match	Score	DB	Length	Indels	Gaps
Best Local Similarity	56.6%	8;	1313;		
Matches	603;	Conservative	0;	Mismatches	33;
					7;

Query Match Score 242.6; DB 8; Length 1313;
 Matches 603; Conservative 0; Mismatches 429; Indels 33; Gaps 7;

Y 15 CAAATAAACATCCGAATCTGAAATTACATCCTGAACTCGTGTGTTACAAAGACAA 74
 Y 47 CARCAACTGTGCAAAAATCAAAGCAACTCTAATCTGACANGCTTACGAAACAA 106

b 75 CAATCTGATCGATCTGTGGTTACGGTGCTAAAGTGAAGTATAGCGGTGTGAACT 134
 b 107 CAATTATCGACATCTGGTGTAAACATCTPATCAACGTTACGCTTAACAT 166

y 135 GAA --- TGACAAAGACCAGTCAAACTGACCTTCCTCTAACTTAAGATCGTGT 188
 y 167 CTACTCTACTAACCGAACCGTCTGGTATCTACTCTAAACCTCTGAGTAACAT 226

y 189 TACTCGAAATCGAACATCATCTTCACACTCCGTTACCTGGACTCTCTGTTCTCTG 248
 b 227 CGTCAGAACAAACATCATCACACATCACACATCACACATCACACATCACAC 286

y 249 GATTCGTAATCCGAAATCAAGAACGAGCGGTATCCAAATTAACATCACAC 308
 b 287 GGTCGTAATCCGAAATCTTACATCAACAGTTAACCTA-----ACACGAAATACAC 337

y 309 CATCATCAACTGCA --- GAAGATAAACTCTGGTGGAAAGATCTCCATCCGGTAACCG 365
 b 338 TATCATCGACTGCATCTGAAACAACTCTGGTGGAAAATCTCTGAACTACACAA 397

y 366 TATCATCTGGACTCTGATGATACTAACGTTAAAGCCAATCTGTCTCGAAATCAA 425
 y 398 ATATCTGACCTGAGAACACTGCTGGTAACACGAAACTGGTTTCACATCACAC 457

b 426 CATCCGTTGAAGAACATCAATCTGAAATCATCAATCTGGTCTCTGTTACCTACCAA 485
 b 458 TCAGTAGTGTATCTCATCTGACATTAATAATGGATCTCTGTTACCTACCAA 517

y 486 C --- CTGACAATGTAAATCTACATCAACGTTAAACTCTGGAAATCTPATAACCGACATCAA 542
 b 518 CGCCTGGGTAACCTCTGATCTCATCAACGTTAAACCTGTATCTC 577

y 543 AGACATCCGGAAGTTATGCTAACGGTAACATCTAACCTGAACTGGTGTGACATGA 602
 b 578 TAACATCTGGGAGACATCAGCTTGTGACACATCTAACCTCTAACATCTGCAAGGA 637

y 603 TCATGGTCAAGTCACTCTGATGAAATCATCTCCTAACCTGAACTGGTGTGAC 662
 b 638 ---CAGCCGTACGTTGATCCGTTACTCTAACATGAACTGAACTGGTAAAC 694

QY 723 TAATCCGGTGTGATGTAACAAAGAAATCATATGTCTCATGCTGGTACAGACTCTTA 782
 Db 755 TAACTACCTGTGTCAACAAACGGTACATPACCTGTAACCTGTCCTGGTACATCAAC 814

QY 783 CATCAAACCTGAAAGAACGACTCTCCGGTGGTAAPTCCTGACTGGTCCAAATACACCA 842
 Db 815 TATCATCTGAGCTTAACCTCTAACATCAACGAGCGTGGT-----GTTATCA 868

QY 843 GAACTCTAAATACATCAACTACGGGACCTGTACATCGGTAAGAATGTCATCTCGTGG 902
 Db 869 GAAACCTAAATATCTCTAACTGTCGAACTCTGACATCTGGTGTAAAGTATCATCGTAA 928

QY 903 CAA --- ATCTAACTCTCAGTCACTTAACCTCTAACATCAACGAGCGTGGT-----GTTATCA 959
 Db 929 AACCGGTCTACTGACATCTAACATGTCGAACTCTGACATCTGGTGTAACTGCTTA 988

QY 960 CCTGGATTCTCTAACCTGAACTCTGAAATGGCTGTATACACCTAACAGTACTCTAAC 1019
 QY 989 CATCAACGTTGTTGACGTGAGCTTAACTGGTGTACGTAACATCTGACATCTGGTAACT 1044
 QY 1040 AGAGAGAAAAGCTTTCTGGCTCGATCTCISATTCCGACAA 1064
 Db 1049 ACCGGAAAATCATCAAACGATGGTACTCTAACCTAACAA 1093

RESULT 7
 US-09-350-756-5
 ; Sequence 5, Application US/09350756
 ; Patent No. US20020034521A1
 ; GENERAL INFORMATION:
 ; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
 ; JOHN S. LEE
 ; PETER PUSHKO
 ; MICHAEL D. PARKER
 ; JONATHAN F. SMITH
 ; MARK T. DERTBAUGH
 ; LEONARD SMITH
 ; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
 ; FILE REFERENCE: 003/124/SAP RID 98-21
 ; CURRENT APPLICATION NUMBER: US/09/350,756
 ; EARLIER APPLICATION NUMBER: US 60/092,416
 ; EARLIER FILING DATE: 1998-07-10
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: Apple Macintosh Microsoft Word 6.0
 SEQ ID NO 5
 LENGTH: 1317
 ; TYPE: DNA
 ; FEATURE: /note="synthetic sequence encoding botulinum neurotoxin"
 ; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
 US-09-350-756-5

Query Match Score 242.6; DB 10; Length 1317;
 Best Local Similarity 55.6%; Pred. No. 3.3e-59;
 Matches 603; Conservative 0; Mismatches 429; Indels 33; Gaps 7;

QY 15 CAAACAATAACATTCGGAAATCTGAACTATCATCTGAACTGGTACAAAGACAA 74
 QY 48 48 CAACAGCTGTGACAGAAATGATGAACTGGTGTGAAATGATGAACTGGTGTGACT 134
 Db 48 CAACAGCTGTGACAGAAATGATGAACTGGTGTGAAATGATGAACTGGTGTGACT 167

QY 75 CAAATGCTGATGTTGCTGGTGTGAAATGATGAACTGGTGTGAAATGATGAACTGGTGTGACT 167
 Db 108 TAATGTCATGACATCTGGTACGGTCCACATCTCCATCAACGTTGACATCTGGTACAT 167

QY 135 GAATGACAG-----AACAGATCAAATCTGACTCTAACCTGGTACATCTAAC 188
 Db 168 CTACGCCACAAATGAAACAGTCGGTACATCTCCAAAGCTTCGAGTCATCTGGTACAT 227

QY 189 TACTAGATCTGAAACATCATCTTCACCTGGTATTCCTGGACTCTCTGCTCTCTG 248
 Db 228 CGCTGATGAAACGCTACATCATCTCCATCAACGAAACTAACCTGGTACATCTGGTACAT 287

Y 249 GATTGTATCCGAAATACAGAACCGTATCCAGAATTACATCCACAATGAATACAC 308 ; EARLIER APPLICATION NUMBER: US 60/092,416
 D 288 GGTCCGATCCAAAGTACTCAACGGTCACTGAAAC-----GAGTACAC 338 ; EARLIER FILING DATE: 1998-07-10
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: Apple Macintosh Microsoft Word 6.0
 ; SEQ ID NO 10
 ; LENGTH: 702
 ; TYPE: DNA
 ; ORGANISM: Clostridium botulinum
 ; FEATURE:
 ; US-09-350-756-10

Query Match 16.5%; Score 221.6; DB 10;
 Best Local Similarity 61.1%; Pred. No. 2.2e-53;
 Matches 419; Conservative 0; Mismatches 249; Indels 18; Gaps 3;

QY 15 CAACAAATAAACTCGAAATCCTGAAACATATCATCCTGAACTTGCGTTAACGACAA 74
 Db 24 CACTATAATCAGAARATCATCAAACCTCTCATCCTGAACTTGCGCTAACGACAA 83
 QY 75 CAATCTGATCGATCTGTCGTTAACGGTCTAAAGTCAAGPATACGCGGNTT---- 129
 Db 84 TCACCGATGACCIGTCAGCTCCAAATCACATGGTCTAACGTTAACCTT 143
 QY 130 GAACTGATGACAGAAAACAGTCAAACTGACCTCTCGCTAACATGATCGTGT 188
 Db 144 CGATCCGATGACAGAAAATCAGATCGACCTCTGAACTTCAGATCCTCAAATCAGT 203
 QY 189 TACTAGAAATCAGAACATCATCTCAACTCCGTTAACCTGACTTCCTGTTCCPTCTG 248
 Db 204 TATCTGAAATGGTATGCTATGCTAACCTCTGTTAACCTGAACTTCACCTCCCTCTG 263
 QY 249 GATTGTATCCGGAATAGAAGCAGGGTATCCAGAATTACATCCAAATGAAATACAC 308
 Db 264 GATCGGTATCCGAATTAATCTCAACTTCC-----ATCTCTGACAACTGAAATACAC 314
 QY 309 CATCAACTCTGAAATGAGATAACTCTGGTGAAGAATCTCAGCTCCATCCGGTAACCGTAT 368
 Db 315 CATCATCAACTCTGATGGAAACATCTCCTGTTGAATGTTAACATCTGAAACTGGTAAAT 374
 QY 369 CATCGGACTCTGATCGATAACGGTAGACCAAACTGTTAACATCTGAAATACACAT 428
 Db 375 CATCGGACTCTGAGCTGAGCTCAGTCAACAGTCAACAGCTGTTAACATACCTCA 434
 QY 429 CGGTGAAGACATCTGTAATGAACTCATGTTAACATCTGAACTGGTGTGTTAACATCG 485
 Db 435 GATGATCAAATCTGATGACATACGTTAACATGCTGAACTTCAACACATCG 494
 QY 486 CCTGAACTGCTAAATCTACATACGGTAACCTGAACTGGTAAATCTGAAATACCGACATCAAAGA 545
 Db 495 TCTGATAACTCCAAATCTACATCAACGGCCTGATCTGAACTGGTGTGACATCG 554
 QY 546 CATCGTGAAGTTACCTGTAACCTGAACTGTTAACCTCAACCTGAACTGATCG 605
 Db 555 TCTGGTAAATCTCAGTCAATGCTGAACTGGTGTGACATCGTGTGACAC 614
 QY 606 TACCGAGTCACTCTGAAATACCTGCTAACCTCAACCGAACCTGCTCAAGTCGAA 665
 Db 615 TCACCGCTACATCTGGTCAATACCTCAATCTGACATCTGACAC 674
 QY 666 TATCGAAAGCTGTTCTGGTCAACCTAACAA 691
 Db 675 AATCAAAGACCTGAGACACAGT 700

RESULT 9
 US-10-051-952-9
 Sequence 9, Application US/1005152
 ; Sequence No., US/1005152
 ; Patent No., US20020107199A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Walker, Patricia
 ; TITLE OF INVENTION: Botulinum Toxin
 ; FILE REFERENCE: 2333CIP
 ; CURRENT APPLICATION NUMBER: US/10/051,952
 ; CURRENT FILING DATE: 1999-07-09

APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
 APPLICANT: John S. Lee
 APPLICANT: Peter Pushko
 APPLICANT: Michael D. Parker
 APPLICANT: Jonathan F. Smith
 APPLICANT: Mark T. Dertbaugh
 APPLICANT: Leonard Smith
 APPLICANT: Botulinum Neurotoxin Vaccine
 FILE REFERENCE: 003/124/SAP RIID 98-21
 CURRENT APPLICATION NUMBER: US/09/350-756
 CURRENT FILING DATE: 1999-07-09

APPLICANT: Peter Pushko
 APPLICANT: Michael D. Parker
 APPLICANT: Jonathan F. Smith
 APPLICANT: Mark T. Dertbaugh
 APPLICANT: Leonard Smith
 TITLE OF INVENTION: Botulinum Toxin
 FILE REFERENCE: 2333CIP
 CURRENT APPLICATION NUMBER: US/10/051,952
 CURRENT FILING DATE: 1999-07-09

CURRENT FILING DATE: 2002-01-17
 PRIOR APPLICATION NUMBER: 09-730,237
 PRIOR FILING DATE: 2000-12-05
 NUMBER OF SEQ ID NOS: 12
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 9
 LENGTH: 3894
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: synthetic
 OTHER INFORMATION: Primers used to introduce Stu I and EcoR I
 OTHER INFORMATION: restriction sites into the 5' and 3' ends of the
 OTHER INFORMATION: BONN/A-L chain gene fragment
 JS-10-051-952-9

Query Match 16.3%; Score 218.6; DB 12; Length 3894;
 Best Local Similarity 51.1%; Pred. No. 4e-52;
 Matches 680; Conservative 0; Mismatches 624; Indels 27; Gaps 6;

2Y	16 AACAAATACAACTCGGAAATCCTGAAATACTCATCTGAACTCTGGTACAANGAAC 75
Db	2575 AATAATATATAGTATATAGTACTATAGTACTATAGTTAAGGTATAGGTGG 2634
Qy	76 AATCTGATCGATGTGTGTTACGGGTAAAGTGAAATAAGCAACGGTGTGAATG 135
Db	2635 CGTTATAGATTCATGGTATGGCAACTAATGATAGTTCAATGTATCTT 2694
Qy	136 AATGAACTCTGAAATCTGAAACTCTCCCTAACTCTGATAGTCGTGTT 189
Db	2695 AATGATAAGGAAATGGCAATTAAATAATTCTGAAAATAGTATATAACGGCA 2754
Qy	190 ACTCAGATCAGAACATCATCTCAACTCCGTATTCGGACTCTCTGTTCTCGG 249
Db	2755 CATAAAGAAATTCTGTTAAATTAATGATAATGAAATCTGAAATGAAATACCC 309
Qy	250 ATTCGATTCGGAAATACAAGAACCGGGTATCCGAAATTACATCACAAATGAA 2814
Db	2815 GTAAAGGCCTCAATTAATTAATGATAACATCTCAATGAAATGAAATACCA 2874
Qy	310 ATCATCACTGATGAAATAACTCTGGTGGAAATCTGGCTAACCGCTAACGTT 369
Db	2875 ATAATAGTGTGTTAAAAAAATGCTCGGGAAATGATCTTAAAGGAAATAAGATA 2934
Qy	370 ATCTGGACTCTGATGATCACGGTAACGGAAANTCTGTTCTGATAAACATC 429
Db	2935 ATATGGCATTATAGTGGTTATGCAAATCTAAATCTAAATTTTCGATAATGATA 2994
Qy	430 CGTGGAGACATCTGATGATCACATCAACGGTAACTCTGGTACCA--ATAAC 486
Db	2995 AARATAATATACTGAGTATATAAAATAAGGTTTCATCAACTATATAATGATA 3054
Qy	487 CTGACAACTGCTAAATCTACATCAACGGTAACCTGAACTGGAAATCTAACCGACATCAAGAC 546
Db	3055 TTAGTAAAGCAAAATTATAAAGGAAGTTGAAAGTGAAGAAATTATTAAC 3114
Qy	547 ATCGTAGGTTATCGCTAACGGTAAATCATCTCAACCTGGACGGTACATCGATCGT 606
Db	3115 TTAGTAAAGTAACTTGTAGTAACTGATAGTCAAAATTAATGATGAAATAC 3174
Qy	607 ACCCGATTCATCTGGATGAAATACTCTCCATCTCAACCCGAACTCTGGCTCAAT 666
Db	3175 ACTAAATGTTGGATTAGGATTATGTTGAAATGCTAACGGTAAATGCTAACGAA 3234
Qy	667 ATCGAGAAACGGTACAGATCCAGTCAGTCCAGTCAACTCGAAATACCTGAAACACTCTGGGTAAAT 726
Db	3235 GTATCTCTACATATGGATTCAATCTCAAAATACTTAAAGGATTTGGGGGAA 3294
Qy	727 CCCTGCTGATGAAAGAAATCTGTAACAGAAACTCTGTAACAGAAACTCTPACATC 786
Db	3295 CCTTTAAGTAGGGTACRACTATCTGTAAATCAAGGTATGAAATAATCTPATATA 3354
Qy	787 AAACCTGAAAGAAAGACTCTCGGTTGGTAAATCTGGACTCGTCCAAATAAACCGAAC 846

RESULT 10
 US-09-350-756-4
 Sequence 4, Application US/09350756
 ; Patent No. US2002034521A1
 ; GENERAL INFORMATION:
 ; APPLECTANT: U.S. Army Medical Research Institute for Infectious Diseases
 ; APPLICANT: John S. Lee
 ; APPLICANT: Peter Pushko
 ; APPLICANT: Michael D. Parker
 ; APPLICANT: Jonathan F. Smith
 ; APPLICANT: Mark T. Derizbaugh
 ; APPLICANT: Leonard Smith
 ; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
 ; FILE REFERENCE: 003-124/SAP RIID 98-21
 ; CURRENT APPLICATION NUMBER: US/09/350,756
 ; CURRENT FILING DATE: 1999-07-09
 ; EARLIER APPLICATION NUMBER: US 60/092,416
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: Apple Macintosh Microsoft Word 6.0
 ; SEQ ID NO: 4
 ; OTHER INFORMATION: /note= "synthetic sequence encoding botulinum neurotoxin"
 ; US-09-350-756-4
 LENGTH: 1400
 ; TYPE: DNA
 ; ORGANISM: Artificial
 ; FEATURE:
 ; OTHER INFORMATION: /note= "synthetic sequence encoding botulinum neurotoxin"
 ; US-09-350-756-4

2Y 194 AGAATCGAAACATCATCTTCAACTCCGATTCCTGGACTCTCTGTTOCTCTGGATC 253
 Db 1354 TAAAAATGCTATTGTTATAATAGTATGTAATGAAATTAGTACTGCTTGGATAA 1413
 2Y 254 GATCCGAATACAGAACCGGTATCCAGAATTACATCCACATGAAACCATCA 313
 Db 1414 GAATCTTAAGTATTAACTGATAAAGCTTAAT-----AATGAAATACATAA 1464
 2Y 314 TCAACTCATGAGAAATACTCTGGTGGAGATCTCGCGGATCGPATCATCT 373
 Db 1465 TAAATGTTATGCAAATTAATCAGGATGAAAGTATCAGTTAACTTAATGTTGAAATAACT 1524
 2Y 374 GGACTCTGATCGATAATACGSGTAAGACCAAACTGTTGAACTGAAACATCCGTG 433
 Db 1525 GGACTTACAGATACTCAGAAATAAATAAAGTGTGTTAAATACGTC----- 1579
 2Y 434 AAGACATCTGAAATACATCACGTTGCTTGTTGATCACCATAA--CCITGA 490
 Db 1580 ----AATGATAATAATATCACAGTGGATTGTAATACATAATAGATAA 1634
 2Y 491 ACAATGGTAAATCTGATAACCGTAACTGGAAATCTAAACGGACATCAAGACATCC 550
 Db 1635 ATAACTCTRAAATTATAATGGAGATAATAGATCAAACCAATTCAAAATTAG 1694
 QY 551 GTAAAGTATCCCTAAGGTAAATCTCAACTGCGCTGACATCGATCGTACCC 610
 Db 1695 GTAAATATCATGTTGTAATATAATATGTTAAATTAGTGGTTGAGATAACATA 1754
 QY 611 AGTCATCTGGTGAATTAACCTCTCACTCTCAAAACGAACTGTCAGTCAGTC 670
 Db 1755 GATATTTGGATAAATATTTAACTTTGATAAGGAAATAATGAAAAGAAATCA 1814
 QY 671 AAGAACGGTACAGATCGTCACTCCGTAACCTGAAAGACTCTGGTAATCGGC 730
 Db 1815 AAATTTATATGTTAAACAAATTCAAGSTATTAAAGACTTTGGGIGATTATT 1874
 QY 731 TGATGTCACAGATACTATGTCATGCTCAATGCAAGAACCTTACATCAAC 730
 Db 1875 TACAATGATAACCATACTATGTTAAATTATGTCATAAAATATGCGATG 1934
 QY 791 TGAAGAAG 799
 Db 1935 TAATATG 1943

Search completed: November 1, 2002, 08:17:24
 Job time : 87 secs

GenCore version 5.1.1.3
 Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 06:20:38 ; Search time 3271 Seconds

(10307.574 Million cell updates/sec)

(*without alignments)

Scoring table: IDENTITY_NUC

GAPOP_10.0 , Gapext 1.0

Perfect score: 1341

Sequence: 1 gaatttacatggccaaacaa.....99acccgaaatgttaagaatcc 1341

Searched: 24791104 seqs, 1257143825 residues

Total number of hits satisfying chosen parameters:

49582208

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Result No.	Score	Query	Match	Length	DB	ID	Description
1	1341	/cgn2_6/ptodata/1/pna/US6000_COMB.seq;*		100	0	1341	34 US-09-910-186A-7 Sequence 7, Appli
2	1339.4	/cgn2_6/ptodata/1/pna/US6001_COMB.seq;*		99.9	1341	17 US-09-910-186A-7 Sequence 2, Appli	
3	1339.4	/cgn2_6/ptodata/1/pna/US6002_COMB.seq;*		99.9	1341	23 US-09-910-186A-7 Sequence 7, Appli	
4	1324.4	/cgn2_6/ptodata/1/pna/US6003_COMB.seq;*		98.8	1348	23 US-09-910-186A-7 Sequence 39, Appli	
5	1319.4	/cgn2_6/ptodata/1/pna/US6004_COMB.seq;*		98.4	1351	5 US-09-910-186A-7 Sequence 6, Appli	
6	741.2	/cgn2_6/ptodata/1/pna/US6005_COMB.seq;*		55.3	1547	1 PCT-US97-1594-45 Sequence 45, Appli	
7	741.2	/cgn2_6/ptodata/1/pna/US6006_COMB.seq;*		55.3	1547	11 US-09-910-186A-7 Sequence 45, Appli	
8	741.2	/cgn2_6/ptodata/1/pna/US6007_COMB.seq;*		55.3	1547	43 US-10-271-012-45 Sequence 45, Appli	
9	741.2	/cgn2_6/ptodata/1/pna/US6008_COMB.seq;*		55.3	3876	1 PCT-US97-1594-43 Sequence 41, Appli	
10	741.2	/cgn2_6/ptodata/1/pna/US6009_COMB.seq;*		55.3	3876	11 US-08-704-159-41 Sequence 41, Appli	
11	741.2	/cgn2_6/ptodata/1/pna/US6010_COMB.seq;*		43	3876	43 US-10-271-012-41 Sequence 3, Appli	
12	736	/cgn2_6/ptodata/1/pna/US6011_COMB.seq;*		54.9	3876	29 US-09-910-186A-7 Sequence 3, Appli	
13	736	/cgn2_6/ptodata/1/pna/US6012_COMB.seq;*		54.9	3876	39 US-10-051-952-3 Sequence 3, Appli	
14	663.4	/cgn2_6/ptodata/1/pna/US6013_COMB.seq;*		49.5	4051	21 US-09-910-186A-7 Sequence 43, Appli	
15	662.8	/cgn2_6/ptodata/1/pna/US6014_COMB.seq;*		49.4	1526	1 PCT-US97-1594-43 Sequence 43, Appli	
16	662.8	/cgn2_6/ptodata/1/pna/US6015_COMB.seq;*		49.4	1526	11 US-08-704-159-41 Sequence 43, Appli	
17	662.8	/cgn2_6/ptodata/1/pna/US6016_COMB.seq;*		49.4	1526	43 US-10-271-012-43 Sequence 43, Appli	
18	661.8	/cgn2_6/ptodata/1/pna/US6017_COMB.seq;*		49.4	3876	1 PCT-US97-1594-39 Sequence 39, Appli	
19	661.8	/cgn2_6/ptodata/1/pna/US6018_COMB.seq;*		49.4	3876	11 US-08-704-159-39 Sequence 39, Appli	
20	661.8	/cgn2_6/ptodata/1/pna/US6019_COMB.seq;*		49.4	3876	42 US-10-205-56-3 Sequence 39, Appli	
21	661.8	/cgn2_6/ptodata/1/pna/US6020_COMB.seq;*		49.4	3876	43 US-10-271-012-39 Sequence 39, Appli	

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

%

Query

Match

Length

DB

ID

Description

-

QY 1081 CAGATTAAGATAACGAAACAGCGACCTACTCTGGAGCTGTTCAAGAACAT 1140
 DDD 1081 CAGATTAAGATAACGAAACAGCGACCTACTCTGGAGCTGTTCAAGAACAT 1140
 QY 1141 GAAGAATCTACTGACCAAATGGGTGATCGGTATCACCGTTCTACGAATCTGGATC 1200
 DDB 1141 GAAGAATCTACTGACCAAATGGGTGATCGGTATCACCGTTCTACGAATCTGGATC 1200
 QY 1201 GTATTGGAAGATAAAAGACTACTTCTGCATCCAAATGGTACCTGAAGGAAGTAAA 1260
 DDB 1201 GTATTGGAAGATAAAAGACTACTTCTGCATCCAAATGGTACCTGAAGGAAGTAAA 1260
 QY 1261 CGCAAAACCCTGATACCTGAAACTGTTGCAATGGCAGTTCCCAAGGCCAAGGT 1320
 DDB 1261 CGCAAAACCCTGATACCTGAAACTGTTGCAATGGCAGTTCCCAAGGCCAAGGT 1320
 QY 1321 TGGACCGAATAGTAAAGTAA 1341
 DDB 1321 TGGACCGAATAGTAAAGTAA 1341

RESULT²
 US-09-350-756-2 ; Sequence 2, Application US/09350756
 GENERL INFORMATION:
 APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
 APPLICANT: John S. Lee
 APPLICANT: Peter Pushko
 APPLICANT: Michael D. Parker
 APPLICANT: Jonathan F. Smith
 APPLICANT: Mark T. Derrizbaugh
 TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
 FILE REFERENCE: 003/124/SAP RIID 98-01
 CURRENT APPLICATION NUMBER: US/09/350,756
 CURRENT FILING DATE: 1999-07-09
 EARLIER APPLICATION NUMBER: US 60/092,416
 EARLIER FILING DATE: 1998-07-10
 NUMBER OF SEQ ID NOS: 11
 SOFTWARE: Apple Macintosh Microsoft Word 6.0
 SEQ ID NO 2
 LENGTH: 1341
 TYPE: DNA
 ORGANISM: Artificial
 FEATURE:
 OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
 US-09-350-756-2

Query Match 99.9%; Score 1339.4; DB 17; Length 1341;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1340; Conservative 0; Mismatches 1; Indels 0; Gaps 0

Qy	1	GAAATTACGANGGCCAACAAATACATCTGGAAATTCGTAACAAATCATCTGGAACTCG 60
Ddb	1	GAAATTACGANGGCCAACAAATACATCTGGAAATTCGTAACAAATCATCTGGAACTCG 60
Qy	61	CGGTCAAAAGAACAAACAAATCTGATCGATCTGCTGGTAGGTAACTTGAGTATAC 120
Ddb	61	CGGTCAAAAGAACAAACAAATCTGATCGATCTGCTGGTAGGTAACTTGAGTATAC 120
Qy	121	GACGGTTGTTGACTGAAATGCAAGAACATCATCTCAACCTGGACTATCTCGTT 240
Ddb	121	GACGGTTGTTGACTGAAATGCAAGAACATCATCTCAACCTGGACTATCTCGTT 240
Qy	181	ATCCGGTTGTTGACTCAGGATCAGAACATCATCTCAACCTGGACTATCTCGTT 240
Ddb	181	ATCCGGTTGTTGACTCAGGATCAGAACATCATCTCAACCTGGACTATCTCGTT 240
Qy	241	TCCCTTGATGTTGATCTGGATTCATCCAAATACAAGAACGAGGTATCCGAAATACATCACAT 300
Ddb	241	TCCCTTGATGTTGATCTGGATTCATCCAAATACAAGAACGAGGTATCCGAAATACATCACAT 300

RESULT 3

US-09-611-419A-7 Application US/09611419A
; GENERAL INFORMATION:
; APPLICANT: Smith, Leonard A.
; APPLICANT: Byrne, Michael P.
; APPLICANT: Middlebrook, John L.
; APPLICANT: Lapanotiere, Hugh
; APPLICANT: Clayton, Michael A.
; APPLICANT: Brown, Douglas R.
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
; FILE REFERENCE: A33626 067252-0105
; CURRENT APPLICATION NUMBER: US/09/611,419A
; PRIOR FILING DATE: 2000-07-06
; PRIOR APPLICATION NUMBER: PCT/US00/12890
; PRIOR FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/133,865
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,866
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,867
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,868
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,869
; PRIOR FILING DATE: 1999-05-12
; PRIOR FILING DATE: 1999-05-12
; PRIOR FILING DATE: 1999-07-29
; NUMBER OF SEQ ID NOS: 42
; SEQ ID NO 7
; LENGTH: 1341
; TYPE: DNA
; FEATURE:
; OTHER INFORMATION: Synthetic construct based on BONT1 hc
; NAME/KEY: CDS
; LOCATION: (10) ... (1329)
; US-09-611-19A-7

Query Match 99 %; Score 1339; DB 23; Length 1341;
Best Local Similarity 99 %; Pred. No. 0;
Matches 1340; Conservative 0; Mismatches 1; Indels 0;
Gaps 0;

QY 1 GAAATCAGTGGCAACAAATACAAATCCGAAATCTCGAACATATCATCTGAACCTG 50
Db 1 GAAATTACGTGGCAACAAATACATCGATGTCGTTACGGTCAAAAGTGAAGTAC 60
QY 61 CGTTAACAAAGAACATCTGATCGATCGTCGTTACGGTCAAAAGTGAAGTAC 120
Db 61 CGTTAACAAAGAACATCTGATCGATCGTCGTTACGGTCAAAAGTGAAGTAC 120
QY 121 GACGGTGTGAACTGATGCAAAAGAACCGTGAATACTGCATCTGAACCTG 180
Db 121 GACGGTGTGAACTGATGCAAAAGAACCGTGAATACTGCATCTGAACCTG 180
QY 181 ATCCGTGTTACTCAGATCAGAAATCACATCTGAACCGTGAATACTGCATCTG 240
Db 181 ATCCGTGTTACTCAGATCAGAAATCACATCTGAACCGTGAATACTGCATCTG 240
QY 241 TCCTTTGGATTCTGATTCGCCGAAATACAGAAAGACCGTATCCGAAAT 300
Db 241 TCCTTTGGATTCTGATTCGCCGAAATACAGAAAGACCGTATCCGAAAT 300
QY 301 GAATACCCATCATCAACGCTGATGAAATAACTCGTGGAAAGACTCGATCGGGGT 360
Db 301 GAATACCCATCATCAACGCTGATGAAATAACTCGTGGAAAGACTCGATCGGGGT 360
QY 361 AACCGTATCATCTGACTCTGATGATGATGAAATCGTAAAGTAAATCTCGAA 420
Db 361 AACCGTATCATCTGACTCTGATGATGAAATCGTAAAGTAAATCTCGAA 420

RESULT 4
US-09-611-419A-39
; Sequence 39, Application US/09611419A
; GENERAL INFORMATION:
; APPLICANT: Smith, Leonard A.
; APPLICANT: Byrne, Michael P.
; APPLICANT: Middlebrook, John L.
; APPLICANT: Lapanotiere, Hugh

APPLICANT: Clayton, Michael A.
 APPLICANT: Brown, Douglas R.
 TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
 FILE REFERENCE: A33626 06/1252 .01/05
 CURRENT FILING DATE: US/09/611,419A
 PRIOR APPLICATION NUMBER: PCT/US00/12890
 PRIOR FILING DATE: 2000-05-12
 PRIOR APPLICATION NUMBER: 60/133,865
 PRIOR FILING DATE: 1999-05-12
 PRIOR APPLICATION NUMBER: 60/133,866
 PRIOR FILING DATE: 1999-05-12
 PRIOR APPLICATION NUMBER: 60/133,867
 PRIOR FILING DATE: 1999-05-12
 PRIOR APPLICATION NUMBER: 60/133,868
 PRIOR FILING DATE: 1999-05-12
 PRIOR APPLICATION NUMBER: 60/133,869
 PRIOR FILING DATE: 1999-05-12
 PRIOR APPLICATION NUMBER: 60/146,192
 PRIOR FILING DATE: 1999-07-29
 NUMBER OF SEQ ID NOS: 42
 SOFTWARE: Fast-SEQ for Windows Version 4.0
 SEQ ID NO: 39
 LENGTH: 1348
 TYPE: DNA
 NAME/KEY: CDS
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Synthetic construct based on BONTB_HC
 NAME/KEY: CDS
 LOCATION: (1) . . . (1323)
 US-09-611-419A-39

Query Match 98.3%; Score 134.4; DB 23; Length 1348;

Best Local Similarity 99.9%; Pred. No. 0; Gaps 0;

Matches 1325; Conservative 0; Mismatches 1; Indels 0;

NAME/KEY: CDS
 US-09-611-419A-39

QY 550 CGTGAAGTTATCGCTTAACGGTGAATCATCTTCAAACTGGACGGTACATCGATCGTAC 609
 Db 541 CGTGAAGTTATCGCTTAACGGTGAATCATCTTCAAACTGGACGGTACATCGTAC 600
 QY 610 CAGTCATCTGGATGAAATACTCTCCATCTTCAAACACGGAACTGTCAGTCAGTCATCGTAC 669
 Db 601 CAGTCATCTGGATGAAATACTCTCCATCTTCAAACACGGAACTGTCAGTCAGTCATCGTAC 660
 QY 670 GAGAACGTACAGATACGCTTACTCCGATACCTGAAAGACTCTGGGTATCCG 729
 Db 661 GAAACAGGTACAGATACGCTTACTCCGATACCTGAAAGACTCTGGGTATCCG 720
 QY 730 CTGATGTCACAAAGAAATACTATATGTTCATGCTGTAAAGAACCTTCATCAAA 789
 Db 721 CTGATGTCACAAAGAAATACTATATGTTCATGCTGTAAAGAACCTTCATCAAA 780
 QY 790 CTGAGAAAGACTCCTGGTGGAAATCCGTCAAAATACAAACAGAACCT 849
 Db 781 CTGAGAAAGACTCCTGGTGGAAATCTGCTTCACAAATAACAGAACCT 840
 QY 850 AAATACATAACTACCGGACCTGTACATCGGTAAAAGTTCATCCGTCGCAAACT 909
 Db 841 AAATACATAACTACCGGACCTGTACATCGGTAAAAGTTCATCCGTCGCAAACT 900
 QY 910 AACCTCTAGTCATCCATCAATGTCATGTCATGAAAGACTCATCTGCAGTCCTC 969
 Db 901 AACCTCTAGTCATCCATCAATGTCATGTCATGAAAGACTCATCTGCAGTCCTC 960
 QY 970 TTCAACCTGAAATCGGAATGGCGTGTATCACACTACAGACTTCAGAAAGAAAGAA 1029
 Db 961 TTCAACCTGAAATCGGAATGGCGTGTATCACACTACAGACTTCAGAAAGAA 1020
 QY 1030 AAGCTTTTCCTGGTCCATCTGATCTGAGACTTCACAAACCATCCAGTCAA 1089
 Db 1021 AAGCTTTTCCTGGTCCATCTGATCTGAGACTTCACAAACCATCCAGTCAA 1080
 QY 1090 GAATACGAAACGCCAACCTACTCTGCCAGCTGTCAAGAAAGATGAAATCT 1119
 Db 1081 GAATACGAAACGCCAACCTACTCTGCCAGCTGTCAAGAAAGATGAAATCT 1140
 QY 1150 ACTGACGAAATCGGTCTGATCGGTATCCGCTTCTAGGATCTGTTATCGTAA 1209
 Db 1141 ACTGACGAAATCGGTCTATCGTATCCGTTCTAGGATCTGTTATCGTAA 1200
 QY 1210 GAATACAAAGACTACTCTGCACTTCACAAATGGTACCTGAAAGAAGTTAACGCAAACCG 1269
 Db 1201 GAATACAAAGACTACTCTGCACTTCACAAATGGTACCTGAAAGAAGTTAACGCAAACCG 1260
 QY 1270 TACACCTGAAACTGGTTGCAATTGGCAGITCATCCGAAAGACGAGGTTGGACCGAA 1329
 Db 1261 TACACCTGAAACTGGTTGCAATTGGCAGITCATCCGAAAGACGAGGTTGGACCGAA 1320
 QY 1330 TAGPA 1335
 Db 1321 TAGPA 1326

RESULT 5
 US-09-910-186a-7.rnppm
 Sequence 6, Application US/08123975A
 GENERAL INFORMATION:
 APPLICANT: Middlebrook, John L
 APPLICANT: LaPenotiere, Hugh F
 APPLICANT: Clayton, Michael A
 APPLICANT: Brown, Douglas R
 TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE
 TITLE OF INVENTION: AGAINST C. BOTULINUM
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: John F. Moran
 STREET: Off. of Command Jdg. Adv.
 CITY: Frederick

STATE: Maryland
 COUNTRY: USA
 ZIP: 21702-5012
 COMPUTER READABLE FORM:
 MEDIUM TYPE: FLOPPY disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/123,975A
 FILING DATE: 21-SEP-1993
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Hendricks, Glenna
 REGISTRATION NUMBER: 32,535
 REFERENCE/DOCKET NUMBER: mid-1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (301) 619-2065
 TELEFAX: (301) 619-7114
 INFORMATION FOR SEQ ID NO: 6:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1351 base Pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: unknown
 MOLECULE TYPE: DNA (genomic)
 HYPOTHETICAL: NO
 ANTI-SENSE: NO
 ORIGINAL SOURCE:
 ORGANISM: Clostridium botulinum
 US-08/123,975A-6

Query Match Score 1319.4; DB 5; Length 1351;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1320; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 15 CAACAAATACAATTCCGAATCTGAAATCATCCTGAACTAACAGACAA 74
 QY 9 CARCAAATACAATTCCGAATCTGAAATCTGAACTAACAGACAA 68
 QY 75 CAATGTGATGATGATCTGTCGGTTACGGGTGCTAAAGTGAAGTAACTGCGGTGTGAACT 134
 Db 69 CAATCTGATGATCTGTCGGTTACGGGTGCTAAAGTGAAGTAACTGCGGTGTGAACT 128
 QY 135 GAATGACAAGAACGATCAAATGAACTGAACTCTGCTAAACTCTGTTACTCA 194
 Db 129 GAATGACAAGAACGATCAAATGAACTGAACTCTGCTAACTCTGTTACTCA 188
 QY 195 GAATGACAATCATCTGAAACTCCGTTATTCCTGGACTTCTCTGGATTCG 254
 Db 189 GAATGACAATCATCTGAACTCCGTTATTCCTGGACTTCTCTGGATTCG 248
 QY 255 TATCCGAAATAACAGAACGACGGTACCTGAACTAACATCCAGATAACCATCAT 314
 Db 249 TATCCGAAATAACAGAACGACGGTACCTGAACTAACATCCAGATAACCATCAT 308
 QY 315 CAACCTGAAAGATAACTCTGTTGAAAGATCTCCTGAACTAACATCCGTTGAAAGATCTG 374
 Db 309 CAACCTGAAAGATAACTCTGTTGAAAGATCTCCTGAACTAACATCCGTTGAAAGATCTG 368
 QY 375 GACTCTGATGATGATCAACGGTAAGACGAAATGTGTTCTCTGAAATACATCGTGA 434
 Db 369 GACTCTGATGATGATCAACGGTAAGACGAAATCTGTTCTCTGAAATACATCGTGA 428
 QY 435 AGACATCTGAAATACATAATCGCTGGTTCTCTGAACTAACCTGACCAA 494
 Db 429 AGACATCTGAAATACATAATCGCTGGTTCTCTGAACTAACCTGACCAA 488
 QY 495 TGCTAAAATCTACATCAACGGTAACCTGAAATCTAATACCGGACATCAAGACATCGTGA 554
 Db 489 TGCTAAAATCTACATCAACGGTAACCTGAAATCTAATACCGGACATCAAGACATCGTGA 548

QY 555 AGTATCGCTAACGGTAACCTCATCTCAACTGACCGTGCATCGTACCCAGTT 614

RESULT 6
 PCT-US97-15394-45
 Sequence 45, Application PC/US9715394
 GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 TITLE OF INVENTION: Botulinum Neurotoxin
 NUMBER OF SEQUENCES: 82
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medien & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America
 ZIP: 94104
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0., Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US97/15394
 FILING DATE:
 CLASSIFICATION:
 NAME: Igolia, Diane E.
 REGISTRATION NUMBER: 40,027
 REFERENCE DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 397-8338
 TELEFAX: (415) 397-8340
 INFORMATION FOR SEQ ID NO: 45:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1547 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 108..1523
 PCT-US97-15394-45

Query Match Score 55.3%; Score 741.2; DB 1; Length 1547;
 Best Local Similarity 72.5%; Pred. No. 8..3e-194; Gaps 0;
 Matches 959; Conservative 0; Mismatches 363; Indels 0;

Qy	10	ATGGCCACAAATAGATTCGAAATTCGTTAACATTCATCGTACCTGGCTTAACAAA 69
Db	204	ATGTTTATATATATATATATCGAAATTAAATATATCTAAATTAAAGATAAAG 263
Qy	70	GACACTGAATGCAAGAACCGATTAAACTGACGTCTCGCTAACCTTAAGCTGGTT 129
Db	264	GATGAAATTAAATAGATTATCGGATATGGGCAAATTAAATATCTAAATTAAAGTC 323
Qy	130	GAACCTGAATGCAAGAACCGATTAAACTGACGTCTCGCTAACCTTAAGCTGGTT 189
Db	324	GAGCTTAATGATAAAATCATTTAAATTAACCTGTTAACATTAGTTAGATGTG 383
Qy	190	ACTCAGAAATGCAACATCTTAACTCCGTTACGGTGCTGTTAACATTAGCTGGTT 249
Db	384	ACTCAAAATCAAGAAATCATATATATATATATATATATATATATATATATATAT 443
Qy	250	ATTGCAATGCCGAAATACAGAACGCGTATCAGATTACATCCCAAAATTAACC 309
Db	444	ATAAGGATAACCTAAATATAGATGTGTTACATCAAAATTAATTATATATATACA 503
Qy	310	ATCATCAACTGCAATGAAATTAACCTGGTGGAAATCTGGTGGTGGTAAACCGTATC 369
Db	504	ATAATTAAATGATGAAATTAACCTGGCTGAAATATCATTTAGGGTAAATAGGT 563
Qy	370	ATCTGGACTCTGATGATGATATCAACGGTAACGGTAACAAATCTGTTACACATC 429
Db	564	ATATGGACTTAATGATGATAATGGAAAACAAACGGTATTTGTTGAAATATACATA 623
Qy	430	CGTGAAGACATCTCTGAAATACATTAATGGCTGGTTCTCGTACCCGTAACCGTATC 489
Db	624	AGAGAGATATCAGAGATATAATGATGTTGTTGTTGACTTAATCTAAATTGTT 683
Qy	490	AACATGGCTAAATCTACATCAACGGTAACCGGARACTTAACCCACATAAGGACATC 549
Db	684	AATAAGCCTAAATTTATATAATGGTAACTGCPAGAACTAAATACGATTAAGATA 743
Qy	550	CGTGAAGTATCGCTAACGGTGAATCATCTCTAACCTGGTGGACATGATCCTAC 609
Db	744	AGAGAGTATGCTTAATGTTGAAATTAATTTAGATGGTATAGTGATGATGACA 803
Qy	610	CAGTCATCGGAAATPACTCTCATCTCAACACGGAACTGTCAGTCATCCAAATAC 669

RESULT 7

US-08-704-159-45

Sequence 45, Application US/08704159

GENERAL INFORMATION:

APPLICANT: Williams, James A.

TITLE OF INVENTION: Multivalent Vaccine For Clostridium

NUMBER OF SEQUENCES: 82

CORRESPONDENCE ADDRESS:

ADDRESSEE: Thalley, Bruce S.

STREET: 220 Montgomery Street, Suite 2200

CITY: San Francisco

STATE: California

COUNTRY: United States of America

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY DISK

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/704,159

FILING DATE:

CLASSIFICATION: 4.24

ATTORNEY/AGENT INFORMATION:

NAME: Ingolia, Diane E.

REGISTRATION NUMBER: 40,027

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-6410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 45:

SEQUENCE CHARACTERISTICS:

TYPE: Dna

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

FEATURE:

NAME/KEY: CDS

LOCATION: 108..1523

US-08-704-159-45

Query Match Similarity 72.5%; Score 741.2; DB 11; Length 1547;

Best Local Similarity 72.5%; Pred. No. 8; 3e-194; Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0;

QY 10 ATGGCCAACAAATACGAAATTCGGAAATCCGAAACTATCATCTGGGTACAAA 69

DB 204 ATGTTTAATAATAATACGAAATTTAAATATCCTAATTTAGATAAG 263

QY 70 GACAACAAATCTGATCGATCTGTCGGTCAAGGGTCTAAAGTGAAAGTATGACGGTGT 129

DB 264 GATAAAATTAATAAGATTTATCAGATAATGGCAAAAGTAGGGATAATGGATC 323

QY 130 GRACTGAATGACAAACACCGTCAAATGACACTCTTCGCTTAACCTTAAGATCCGTGT 189

DB 324 GAGCTTAATGATAAAATCATTTAAATTAACTAGTTCAGCAATAAGTTAGATG 383

QY 190 ACTCAAAATCGAAATCATCTTAAACTCATCGTAACTCCGTTATCCTGCTCTGG 249

DB 384 ACTCAAAATCGAAATCATATTTAAATAGTGTGTCTCTGTTACSGTTAGCTTTGG 443

QY 250 ATTGGAATCCGAAATACAGAAACCGTATCCAGAAATCACCCAAATGAATACC 309

DB 444 ATAAGATAACTTAATAATAGATAATGTTATACAAATTTATCATAATACATA 503

QY 310 ATCATCAACTCATGAGAAATACCTCTGGTAACTGCTCCATCCGGTAACCCATC 369

DB 504 ATAATTAATGTTATAATAATCTGGCTGAAAAATCATGGGTATAGATA 563

QY 370 ATCTGGACTCTGATGGATAACCGTAAGACCCAATCTGTATCTCGAAATCACATC 429

DB 564 ATATGGACTTAATGATAATGATAATAAATGGAAAACCAATCGTATTTGAATAACATA 623

QY 430 CGTGAGAACATCTCGAAATCATCAATGGCTTACCCACAAATACTG 489

DB 624 AGAGAGATAATCGAGATATAATAATGGTTTGTAACTATACPTAATTTG 683

QY 490 AACATGGCTAAATAATCACATCAAGGTAAACTGAAATTAACCGCATCAAGACATC 549

DB 684 AATRAGCTAAATTAATATAATGTTAGCTGAATAAACAGATAAAGATA 743

QY 550 CGTGAGACTTACGCTGAAATCATCTCGGTACCGTACATCGTACCTGCCATC 609

DB 744 AGAGAGTTATGGCTATGATAAAATTATGGTTAATGGAAATTAATGAGGTGATAACACA 803

QY 610 CAGTATCTGGTAAATGAAATCTCCTCAACCTTAACTCAGGAACTGTCAGCCAAATTC 669

DB 804 CAATTATTGCTGATAAAATTGTTAATGGAAATTAATGCTAAATATT 863

QY 670 GAAGAAGCTGTTAAAGTCCAGTCCTACTCGAAATACCTGAAAGACTCTGGGTAAATCCG 729

DB 964 GAAAAGATATATATATATACATCATGAAATGTTGGGAATTCCT 923

RESULT 8

US-10-271-012-45

; Sequence 45, Application US/10271012

; GENERAL INFORMATION:

; APPLICANT: Williams, James A.

; TITLE OF INVENTION: Multivalent Vaccine For Clostridium

; Botulinum Neurotoxin

; NUMBER OF SEQUENCES: 82

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Medlen & Carroll

; STREET: 220 Montgomery Street, Suite 2200

; CITY: San Francisco

; STATE: California

; COUNTRY: United States of America

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/271,012

; FILING DATE: 15-Oct-2002

; CLASSIFICATION: <Unknown>

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US/08/704,159

FILING DATE: <Unknown>	ATTORNEY/AGENT INFORMATION
NAME: Igolila, Diane E.	REGISTRATION NUMBER: 40
REFERENCE/DOCKET NUMBER	TELECOMMUNICATION INFORMATION
TELEPHONE: (415) 705-84	TELEPHONE: (415) 397-8338
INFORMATION FOR SEQ ID NO: 45:	SEQUENCE CHARACTERISTICS:
LENGTH: 1547 base pairs	
TYPE: nucleic acid	
STRANDEDNESS: double	
TOPOLOGY: linear	
MOLECULE TYPE: DNA (genomic)	
FEATURE:	
NAME/KEY: CDS	SEQUENCE DESCRIPTION: SEQ ID
LOCATION: 108..1523	JS-10-271-012-45
Query Match 55.3% : Sco	Best Local Similarity 72.5% : Pre
Matches 959; Conservative 0;	
10 ATGGCCACAAATACATTTCCGAATC	
204 ATGTTAAATAAATATAGGAAATT	
70 GACACATCTGTCTGACTGCTGCTG	
264 GATATAATTAAATAGGTTATTCAGA	
130 GAACTGAAATGACAGAACCGATTCAA	
324 GAGCTTAATGATAAAAATCAATTAAAA	
190 ACTCAAAATCAGAACACATCTTCAC	
384 ACTCAAAATCAGAACATCATTTAAAT	
250 ATTCTGATTCGCCGAAATACAAGAACGC	
444 ATATGAAATCTCTTAAATTAAGATGTT	
310 ATCATCAACTGCATGAAAGAAATACCT	
504 ATAATTAATGTGTGAAAAAATATTGCG	
370 ATCTGGACTCTGTCTGATGATAACGCGT	
564 ATATGACTTAAATGTGATAATATGGAA	
430 CGTGAAGACATCTGTAAATCATCTAA	
624 AGAGAGAATGATCATGAGACTATAATA	
490 AACAAATGCTAAATCTCATCATACGCT	
684 AATATGCTPAAATTTATTTATGATGTT	
550 CGTAGGTTATCGTAAAGGTAAATTCCTCC	
744 AGAGAGTATGGTAAAGGTAAATTCCTAG	
610 CAGTCTCATGGATGAAATAACTCTCC	
804 CAATTATGGTAAAGATAATTCCTAG	
670 GAAGAACGGTACAGAACGCTTCA	
864 GAAGAAAGATATAAACATCAATCAT	

REFERENCE/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 755-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 41:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 3876 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 1..3873
 PCT-US97-15394-41

Query Match	55.3%	Score 741.2;	DB 1;	Length 3876;
Best Local Similarity	72.5%	Pred. No. 1..3e-193;		
Matches	959;	Conservative	0;	Gaps 0;
Indels	363;	Mismatches	363;	

```

Qy 10 ATGGCCAAACAAATCACCAATTCTCGRAAATTCATGCCAACATTAAGTATG 69
Db 2554 ATGTTTAAATAATAPGCCAAATTAAATAATTCTTAAATTAAAGTATAG 2613
Qy 70 GACACAACTGTGATGATCCTGTTACCGGTCTAAGTGTGACTATACCGGGT 129
Db 2614 GATAAAATTAAATAGTTTACGGGATGGCAAGGTAGGTATGTGGATC 2673
Qy 130 GAACTGAGACGACAAGAACCAAGTCAAACTGACCTCTCCGOTAACTCTA 189
Db 2674 GAGCTTAAAGTATAAAACAAATTAATAGTCAAAGTAAATAGTAAAGTGT 2733
Qy 190 ACTCAGAACTGAGACATCATCTCAACTCCGTATTCTGGACTTCCTCTGG 249
Db 2734 ACTCAAACCTCCGAAATTAAGAACGAGCTTCCGATTACATCCAACTGA 2793
Qy 250 ATTCGATATGGCTTCAACATGGTACCTGTTCTGGTCTTCTGG 309
Db 2794 ATAAGATACCTTAAATAGTGTGTTAGTGTAAATATTCATAATGAAATACA 2853
Qy 310 ATCATCAACTCGTAACTGAAATACCTCGTGTGGTGAAGTCTCCATCGGGT 369
Db 2854 ATAATTAATGTGATGAAAAAATAATTCGGCTGCAAAATTATAGGGATA 2913
Qy 370 ATCTGACTCTGTGATGATGATAACGGTAAACTGGRATTCTGATAACATC 429
Db 2914 ATATGACTCTGTGATAACATCAATGGAAATGGAAATGGTGTGATGATCATA 2973
Qy 430 CGTGAGACATCTGTGATAACATCAATGGAAATGGAAATGGTGTGATGATCATA 489
Db 2974 AGAGAGATATAGAGTATAATAGTGTGTTCTGGTAACTTATGTTTGTGAT 3033
Qy 490 AACATGCTAAATCTACATCAACGGTAAACTGGAACTTAAACCGACATCAAGACATC 549
Db 3034 ATAACGCTAAATCTACATCAACGGTAAACTGGAACTTAAACGATATAAAATATA 3093
Qy 550 CGTGAAGTATCGTAACTGGTAAATCATCTCAACCTGCACTGGTAC 609
Db 3094 AGAGAGTATGGTCAATGGTAAATATTAATGTTGATGATGATGACACA 3153
Qy 610 CAGTCATCTGGATGAAATACTCTCAGTCTCAACCCGAACTGCTGATGGTAC 669
Db 3154 CAATTTATGGTGTAAATGGTAAATGGTAACTTAAATGGAAATTAAGTCAATTAATT 3213
Qy 670 GAAGAAGGTCAAGATCCAGTCTACTCGAAATACCTGAAGACTCTGGGTAAATCG 729
Db 3214 GAAGAAGATAAAATCAATATAGGAAATATTAAGATTTGGGAAATCCCT 3273
Qy 730 CTGATSTACACAAAGAAATCTACATGTTCAATGCTGAAAGACTCTAACCAA 789
Db 3274 TTAATGTCACATGAAATGGTAAATGGGGAAATTAAGTCAATTAATTAA 3333
Qy 790 CTGAAAGAAAGACTCTCGGTGGTAAATCCCTGACTCTGGCAAAATPACACGAACTCT 849

```

RESULT 10
 US-08-704-159-41
 Sequence 41, APPLICATION US/08704159
 ; GENERAL INFORMATION:
 ; APPLICANT: Williams, James A.
 ; ATTORNEY: Thalley, Bruce S.
 ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 ; NUMBER OF SEQUENCES: 82
 ; TITLE OF INVENTION: Botulinum Neurotoxin
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medien & Carroll
 ; CITY: 220 Montgomery Street, Suite 2200
 ; STATE: San Francisco
 ; COUNTRY: United States of America
 ; ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/704,159
 FILING DATE:
 CLASSIFICATION: 424
 ATTORNEY/AGENT INFORMATION:
 NAME: Ingolia, Diane E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 41:

SEQUENCE CHARACTERISTICS:
 LENGTH: 3876 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE: NAME/KEY: CDS
 LOCATION: 1..3873

Query Match Score 741.2; DB 11; Length 3876;
 Best Local Similarity 72.5%; Fred. No. 1.3e-193; Mismatches 0; Gaps 0;

Db 10 ATGCCAACAAATCACATTCCAAACTGACAAATCATCTGACCGTGTACAA 69
 Db 2554 ATGTTTAAATAATAGCCTAAATTAAATAATTCCTAAAGTATARG 2613
 Qy 70 GACACAACTGTGTGCTGTTACCGGTAAAGTGTACAGGGTT 129
 Db 2614 GATAAAUTTAAGTTAAAGTAACTTACAGGATATGGATGGATC 2673
 Qy 130 GAATGAATGACAGAACAGTCAACCTGACCTTCCCTAACTCTAGATCGTGT 189
 Db 2674 GAGTTTGTAAATCAAATTAACAGTTCAGCAARTAGTAAAGTATGGTG 2733
 Qy 190 ACTGAAATCAGAACATCATCTCAACTCCGTATTCGGACTCTCTGTTCTCG 249
 Db 2734 ACTAAATCAGATACTATTAATAGTGTGTTGTTAGCTTAGCTTGG 2793
 Qy 250 ATTGTGATCCGGAAATACAGAACGAGGTATCCAGAATTACATCAACACC 309
 Db 2794 ATAAGATACCTAAATTAAGATGTTGTTAACAAATATCATAAATAAA 2853
 Qy 310 ATCATCAACTGCATGAAAGAATAACTCTGGTGGAGATCTCATCGCGGTAACCGTATC 369
 Db 2854 ATAATTAATTGTGTTGAAATAATTCGGCGTAAATTAGGGTTAAGGATA 2913
 Qy 370 ATCTGGACTCTGTGCAATCATCAACGGTAACCTCTGTTACATGAAACATC 429
 Db 2914 ATATGGACTTAATGATAATAATGGAAATTCGGTATTGTTGATAAACTA 2973
 Qy 430 CGTGAAGAATCTGTGATACATCAATCGTGTACCATACCAAACTCTG 489
 Db 2974 AGAGAAAGATATCAGGATATAAAAGTGTGTTGTAACATTAATGTTG 3033
 Qy 490 AACATGCTAAAATCTACATCAACGGTAACCTGAACTTAACTGAAAGACATC 549
 Db 3034 AATAGCTTAAATTTATTAATGGAAATCTGGTAAGTAAATAGATAAA 3093
 Qy 550 CGTGAAGAATCTGTGATACATCAACGGTAACCTGAACTTAACTGAAAGACATC 609
 Db 3094 AGAGAGTTATGGTAAAGTGAATATAATTAGTGGATAAGATAAGACA 3153
 Qy 610 CAGTTCATCTGGTGTAAATACTCTCCATCTCAACACCGAAACTCTGTCAGTCCAATTC 669
 Db 3154 CAATTATTTGGTGAATATTCTGATGAAATATTCTGATGTTAATGCTAAATT 3213
 Qy 670 GAAGACGCTACAGATCCAGTCTACGGTACATCGGAAACTCTGGTTATCCG 729
 Db 3214 GAAGAAAGATATAAAATCTAAATGCAATATGGAAATTTGGGAAATCC 3273
 Qy 730 CTGATGATCACACAAAGAAATCATATGTCATGCTGTTACAGAACCTTACATCAA 789
 Db 3274 TTAATGTTGAAATAGATAATTTATGTTTATGCGGGATAAAATCTATTTAA 3333
 Qy 790 CTGAAAGAAGACTCTCCGGTTGGTAAATCAACCCGAAACTCTGGTCCAAATTC 849
 Db 3334 CTAAAGAAGATCCTACCTGTTAGGTGAATTTAACTGAAATTAATCTAAATCT 3393
 Qy 850 AAATCATORAACCTACCCGCGACCTGTAATCGGTGAAAGTCTACATCCCTCGCAAAATCT 909

Db 3394 AAATATATAAAATTAGAGATTATATATGAGAAAATTATTATAAGAAAGTCA 3453
 Qy 910 AACCTCTCAGTCAGTCATCATGTGACTCGTACAGACTACATCTACCTGGACTTC 969
 Db 3454 AATTCTCAATCTTAAATGATGATATAGTAAAGAATTTATATCTGATATT 3513
 Qy 970 TTCAACCTGAAATCGGAATGCCGTATACACCTCAACTCTCAAGAAAGAA 1029
 Db 3514 TTATTTAAATCAACAGTGGAGATATACCTTAAATTTAAAGAGGAA 3573
 Qy 1030 AACCTTTCTCGGCTCCGATCTCGTATCCGAACTCTACACACCCATCCGATCAA 1089
 Db 3574 AAATGTTTGTAGCTCTAAAGTATCTGATGTTTACATACATACAAATAAA 3633
 Qy 1090 GAAATCAGACGAAACGGCACTACCTGTCAGAAAGATGAGAACTCT 1149
 Db 3634 GAAATGATGAAACAGCCAACTATGTTGAGTAAAGATGAGAACT 3693
 Qy 1150 ACTGACGAAATCGGTCTGATGGTATCCACCGTTCTAGAAATCTGTTATCGAA 1209
 Db 3694 ACTGATGAGATGAGTTGATGGTTATCATCGTTCTAGAAATGGATTGTATGAA 3753
 Qy 1210 GAAATCAAGACTACTCTCTGATCCAACTGCAATGGPACCCGAAAGCTAAAGGCAACCG 1269
 Db 3754 GAGTATAAGATTATTTGTTGATAACTAAAGGTTAAAGGAAACCA 3813
 Qy 1270 TACAACTGAAACTGGTTGAATGGCAGTTATCCGAAAGAACGAGGTTGGCCAA 1329
 Db 3814 TATATTTAAATTGGATGTAATGGCASTTTATCCCTAAAGATGAAGGGTGGACTGAA 3873
 Qy 1330 TA 1331
 Db 3874 TA 3875

RESULT 11
 US-10-271-012-41 ; Sequence 41, Application US/10271012
 ; GENERAL INFORMATION:
 ; APPLICANT: Williams, James A.
 ; THALIEY, Bruce S.
 ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 ; NUMBER OF SEQUENCES: 82
 ; CORRESPONDENCE ADDRESS:
 ; CORRESPONDEE: Medlen & Carroll
 ; STREET: 220 Montrey Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/10/271,012
 ; FILING DATE: 15-OCT-2002
 ; CLASSIFICATION: <Unknown>
 ; PRIORITY APPLICATION DATA: US/08/704,159
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Igolola, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: OPHD-02304
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8336
 ; INFORMATION FOR SEQ ID NO: 41:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 3876 base pairs

TYPE:	nucleic acid	QY	910	AACTCTCAGTCCTCATTAATGATGACATTCGTAAGAAGACTACATCTACCTGGGACTC	969			
STRANDEDNESS:	double	Db	3454	AATTTCATTAATTTATGATGATTAATATAAGATTAATATCAAGATT	3513			
TOPOLOGY:	linear	QY	970	TTCAGCTGATCAGGATGGCTTACACCTACAAGTACTCAGAACATGAGAA	1029			
MOLECULE TYPE:	DNA (genomic)	Db	3514	TTAATTTAAATCACAGTGAGACTATACCTATAATTTAAGAAGGAGAA	3573			
FEATURE:		QY	970	TTCAGCTGATCAGGATGGCTTACACCTACAAGTACTCAGAACATGAGAA	1029			
NAME/KEY:	CDS	Db	3514	TTAATTTAAATCACAGTGAGACTATACCTATAATTTAAGAAGGAGAA	3573			
LOCATION:	1..3873	SEQUENCE DESCRIPTION: SEQ ID NO: 41:	QY	970	TTCAGCTGATCAGGATGGCTTACACCTACAAGTACTCAGAACATGAGAA	1029		
NAME/KEY:	CDS	LOCATION:	1..3873	SEQUENCE DESCRIPTION: SEQ ID NO: 41:	QY	970	TTCAGCTGATCAGGATGGCTTACACCTACAAGTACTCAGAACATGAGAA	1029
Query Match Score: 55.3%; DB 43; Length: 3876;	Best Local Similarity: 72.5%; Prod. No. 1.3e+193; Gaps: 0;	Db	3514	TTAATTTAAATCACAGTGAGACTATACCTATAATTTAAGAAGGAGAA	3573			
Matches: 95%; Conservative: 0; Mismatches: 363; Indels: 0;	QY	970	TTCAGCTGATCAGGATGGCTTACACCTACAAGTACTCAGAACATGAGAA	1029				
10 ATGCCAACAAATACAAATTCCGAAATCTGACAAATATCATCCTGCGTTACAAA 69	Db	3514	TTAATTTAAATCACAGTGAGACTATACCTATAATTTAAGAAGGAGAA	3573				
Y 2554 ATGTTAAATATAATAGCGAAATTAAATATATTTAAAGATATARG 2613	QY	1030	AAGCTTTCGGCCGATCTGATTCGACACTACACCCATCCAGATCAA 1089					
Y 70 GACACAACTGTGATGACTGCTGGTACCGTGTAAAGTGAGSTACGAGGT 129	Db	3574	AAATGTTTAAAGCTTAAAGTGTGTTACATACATTAATATAAA 3633					
Y 2614 GATAATTTAAATAGGTTATGGGTATGGCGAAATGAGGATGAGAA 2673	QY	1090	GATACCGAACAGCGACGACACTCTGGCAGTCAGGAAGATGAGGATCT 1149					
Y 130 GAATGATGACATGAAACCAGTCAACACTGACCTCTCCGGTAACTCTAAGATCGGT 189	Db	3634	GRATAGATGACAGCGCAAATATATGTCAGTGCCTTTAAAAGATGAGAAGT 3693					
Y 2674 GAGCTTATGATGAAATTCAAATTAACTTAACTAGTAAATTTAAAGAT 2733	QY	1150	ACTGACGAAATCGGTGATGGTATCCACCGTTCTAGAACTGGTATCGTATCGAA 1209					
Y 190 ACTGAAATCGACATCATCTCRACTCCGFACTTCGGACTCTCTGTTCCCTCTGG 249	Db	3694	ACTGATGAGAATGGATTGATGGTATCTGGTTCTAGAATCTGGATTGTATGAA 3753					
Y 2734 ACTAAATCGAAATCATATAATTAAGTGTGTCCTGTGTTAGCTTGTGG 2793	QY	1210	GAATACAAAGACTACTCTCTGCTATCCTCCAAATGGTAAACGCAACCG 1269					
Y 250 ATTGATATCCGAAATATAAGAACGAGGTATCCAAATACATGAAATACACC 309	Db	3754	GAGTATAAGANTTTTGTAAAGTAAATGGTCTAAAGGTTAAAAGAAACCA 3813					
Db	2794 ATAAGATAATCTAAATAATAGGTTATGAAATTATATAATGAAATACA 2853	Db	3814	TATAATTTAAATTGGATGTAATGGCASTTTATCCCTAAAGATGAAAGGTGGA 3873				
Db	3874 TA 3875	QY	1270	TACACCTGAAACTGGTGCATTCATCCGAAAGACGAAAGGTGGACCGAA 1329				
Db	3874 TA 3875	Db	1330 TA 1331					
Db	3874 TA 3875	Db	3874 TA 3875					
RESULT: 12	US-09-730-237-3	QY	1270	TACACCTGAAACTGGTGCATTCATCCGAAAGACGAAAGGTGGACCGAA 1329				
Sequence 3, Application US/09/730237	GENERAL INFORMATION:	Db	1330	TA 1331				
Applicant: Walker, Patricia	Applicant: Walker, Patricia	Db	3874	TA 3875				
Title of Invention: Methods of treating Hyperhidrosis	Title of Invention: Methods of treating Hyperhidrosis	Db	3874	TA 3875				
Current Application Number: US/09/730,237	Current Application Number: US/09/730,237	Db	3874	TA 3875				
Number of filing date: 2000-12-05	Number of filing date: 2000-12-05	Db	3874	TA 3875				
Software: PatentIn Ver. 2.1	Software: PatentIn Ver. 2.1	Db	3874	TA 3875				
SQ ID NO: 3	SQ ID NO: 3	Db	3874	TA 3875				
Length: 3876	Length: 3876	Db	3874	TA 3875				
Type: DNA	Type: DNA	Db	3874	TA 3875				
Organism: botulinum toxin	Organism: botulinum toxin	Db	3874	TA 3875				
US-09-730-237-3	US-09-730-237-3	Db	3874	TA 3875				
Query Match Score: 54.9%; DB 29; Length: 3876;	Query Match Score: 54.9%; DB 29; Length: 3876;	Db	3874	TA 3875				
Best Local Similarity: 72.2%; Prod. No. 3,4e-192;	Best Local Similarity: 72.2%; Prod. No. 3,4e-192;	Db	3874	TA 3875				
Mismatches: 366; Indels: 0; Gaps	Mismatches: 366; Indels: 0; Gaps	Db	3874	TA 3875				
QY	10 ATGCCAACAAATCAATTCCGAAATCTGGTAACTTAAAGTAACTGCTTACAA 2913	QY	10 ATGCCAACAAATCAATTCCGAAATCTGGTAACTTAAAGTAACTGCTTACAA 2913	QY	10 ATGCCAACAAATCAATTCCGAAATCTGGTAACTTAAAGTAACTGCTTACAA 69			
Db	2974 AGAGAGATATAGGTTATGAAATATTTAGGTTATGAACTTAAATATTG 3033	Db	2554 ATGTTTATATATAATAGCCAAATTTTAAATATCTTAATATAATAGTATAAG 2613	Db	2554 ATGTTTATATATAATAGCCAAATTTTAAATATCTTAATATAATAGTATAAG 2613			
QY	370 ATCGGACGCTGATGATCAACGGTAGACCAAACTGPAATCTGATTAATACATC 429	QY	70 GACACAACTCTGATGATCTGGTAACTTAAAGTAACTGCTTACAA 729	QY	70 GACACAACTCTGATGATCTGGTAACTTAAAGTAACTGCTTACAA 729			
Db	2914 ATATGGACTTAAATCTACATCAACGGAAACTGGAATCTAAATACCGAACATC 549	Db	3034 AATAACGCTAAATTTATGAAATGGAAAACCAATGGTAACTTAAAGATA 3093	Db	2614 GATPATAATTATAGGTTATCAGGATTAATTAACATCATTACATGAAAT 2673			
QY	550 CGTGAAGTATCGCTAACCGTAAACATCTCAACCTGACATCGATCGTAC 609	QY	130 GAATGAACTGACAGAACGACTCTCAACTCTGACTCTGCTTACATCTAAAGTATCGCTTAC 189	QY	130 GAATGAACTGACAGAACGACTCTCAACTCTGACTCTGCTTACATCTAAAGTATCGCTTAC 189			
Db	3094 AGAGAGTTATGGTAAATTTAGGTTATGAAATATAATAGATAACACA 3153	Db	2674 GAGCTTAATCTGATGAAATTAACATCATTACATGAAATAGTAAAGT 2673	Db	2674 GAGCTTAATCTGATGAAATTAACATCATTACATGAAATAGTAAAGT 2673			
QY	610 CAGTGGTACGCAACTTCAACCCGAATCTGAACTCTGCTTACCTCCAAAT 569	Db	3154 CAATTTATGGTAAATTTAGGTTATGAAATATAATAGATAACACA 3213	Db	3154 CAATTTATGGTAAATTTAGGTTATGAAATATAATAGATAACACA 3213			
Db	3154 CAATTTATGGTAAATTTAGGTTATGAAATATAATAGATAACACA 3213	QY	670 GAAAGACGGTACACATCCAGTCTTACCTCCGAATACCTGAAACTCTGGGTAAATCCG 729	QY	670 GAAAGACGGTACACATCCAGTCTTACCTCCGAATACCTGAAACTCTGGGTAAATCCG 729			
QY	730 CTGATGCTAACACAGAAACTATATGCTCAACTGCTGTTACAAAGACTCTACATCAA 789	Db	3214 GAAGAAAGATAAAATTAAATCATATGAAATTTAGGTTATGAAAT 3273	Db	3214 GAAGAAAGATAAAATTAAATCATATGAAATTTAGGTTATGAAAT 3273			
Db	3274 TTAATACATACAAAGAAATTATGTTATGAAATTTAGGTTATGAAAT 3333	QY	730 CTGATGCTAACACAGAAACTATATGCTCAACTGCTGTTACAAAGACTCTACATCAA 789	QY	730 CTGATGCTAACACAGAAACTATATGCTCAACTGCTGTTACAAAGACTCTACATCAA 789			
QY	850 AAATAGATCAACTACGGCACCTGTAACCTGGTAAAGTCACTGGTGAACATC 909	Db	3334 CTAANGAAAGATTCTGATGTTAACTGAAATTTAAAGATGAAAT 3393	Db	2734 ACTCAAATCTGATGAAATTAATGTTATGAAATTTAGGTTATGAAAT 2793			
Db	3334 CTAANGAAAGATTCTGATGTTAACTGAAATTTAAAGATGAAAT 3393	QY	790 CTGAAACAAACTCCGGTGGTGAATTCGTTACATCCGCTAAATCACGACACT 849	QY	790 CTGAAACAAACTCCGGTGGTGAATTCGTTACATCCGCTAAATCACGACACT 849			
QY	2304	Db	2734 ACTCAAATCTGATGAAATTAATGTTATGAAATTTAGGTTATGAAAT 2793	Db	250 ATTCGTTATCCGAAATACAGGATTAATCAGGATTAATCACATCACAACTAC 309			

Ddb	2794	ATAGAAATCCPAAATTAAAGATGAGGTAACTTATAAATTTATATATAAATGAAATACATAAATGAAATACA	2853
Qy	310	ATCATCAACTGCGATGAGGAATAACTTGGTGGAGATCTCATCCGGTAAACCTTC	369
Db	2854	ATTAATTTATGTAATTAATTCGGCGTAAATAATCTATTCGGGTAAATAGATA	2913
Ddb	370	ATGTGACTCTGTGATCAGATATCACGTAAGACCAAATCTGTTCTCGAAATCACATC	429
Qy	2914	ATATGACTTTAAATTGATAATAATGGAAAACCAATCGGTTATTTTGAAATAACATA	2973
Qy	430	CCTGAGACATCTGAAATCATCAATGCCTGGTACCTCACCATAACCTG	489
Db	2974	AGGAGAGTATTCAGGTATAAAAGATGGTTTTGAACTTACTATATTTTG	3033
Qy	490	AACAACTGCTAAATCTCATCACCGGTAACCTGGAACTCTAAACGCCATCAAAAGACATC	549
Db	3034	AAATACCGTAAATTATATTATGTGAGCTAACATAGATAATRAAGATA	3093
Qy	550	CGTGAAGTTACCTTAACTGCTAACGGTAAATCATCTCACAATCTCAACCGAAACTGCTCAGTCCTACATTC	609
Db	3094	AGGAAGATTGTTGCTAACTGGTAATTTAAATAGGTGAAATATAATAGGTGAAATATAATGATGAAACAA	3153
Qy	610	CACTTCATCTGGTAAATACTCTCCATCTCACAACCGAACTGCTCAGTCCTACATTC	669
Db	3154	CAATTATTGGTGAATATTTCAGTATTTCAGTATTAACTGGATTAACTCAAAATT	3213
Qy	670	GAAAGACCTACAGATTCAGGCTTAACTCGGATACTCTGAAAGACTCTGGTAACTCCG	729
Db	3214	GAAAAGATATAAAATCAATATAAGCTGAAATTAGCCTAAATAGGATTTGGGAAATCTCT	3273
Qy	730	CTGTGTAACAAAGAAACTATAGTCAATGCTGTTGACTGTTGAACTTACATAAA	789
Db	3274	TAAATGTAATTAAGAAATATATAGTTATGGGGAAATAAAATCTATATAAA	3333
Qy	790	CTGAAAGAAAGACTCTCCGGTGGTAACTCTGACTGTTCCAAATACACCGAACTCT	849
Db	3334	CTAAAGAAAGATTCACCGGACCCGTACATCGCSGGAAGTICATCATCCGTOGCAATCT	3393
Qy	850	AAATACATCAACTACCGGACCCGTACATCGCSGGAAGTICATCATCCGTOGCAATCT	909
Db	3394	AAATATTAATTAATAGGATTATATGGAATAATTTGGAATAATTTGAAATCTAA	3453
Qy	910	AACCTCAGTCATCATCAGATCGATCGTAAAGAGTACCTCTACTGGACTTC	969
Db	3454	AATTCATCACTATAATGATGATACTTAAAGAGATTATATATCTGATTTT	3513
Qy	970	TTCACACCTGAATCAGGAATGGCGCTGTATACACCTCAAGACTCTGAAAGAAAGAA	1029
Db	3514	TTCATTTAAATCAAGAATGGGAAAGTATACTTAAATTTGAAAGGGAGAA	3573
Qy	1030	AACCTTCTGGTCCGATCTGTGATTCGCGACTCTACACACCATCCGATCAA	1089
Db	3574	AAATGTTTGTCTTAACTGTTCTATAAATGTTCTGATGTTTAAATATACAAATAAA	3633
Qy	1090	GAATAGCGAACAGCCACCTACTTGCACGTTCAAGAAAGATGAAGATCT	1149
Db	3634	GAATATGTAACAGCCACATATASTGTCAATTGCTTAAAAAGATGAAGAAAGT	3693
Qy	1150	ACGAGAAATCGCTCTGATCGSTACCGTAACTGCGAACTCTACACACCATCCGATCAA	1209
Db	3694	ACTGAGTAACTGGTCAATTGGGTAACTGTTGTTGAACTCTGGTATTCGAA	3753
Qy	1210	GAATCAAGAGTACTTCGCTCCAAATGGTACCTGGTAACTGAACTCCG	1269
Db	3754	GAGATAAAGATPATTTGTGAAATGTTGTTGAACTGTTGAACTGGTAACTGAA	3813
Qy	1270	TACACCTGAAACTGGTCAATTGGGTAACTCCGAAAGACGAGGTGGCCGAA	1329
Db	3814	TATATTAAATGGTGTAACTGGCAGTTATTCCTAAAGATGAAAGTAAAGTAA	3873
Qy	1330	TA 1331	
Db	3874	TA 3875	

RESULT 15
PCT-US97-15394-43
 Sequence 43, Application PC/TUS9715394
 GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 APPLICANT: Phalley, Bruce S.
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 NUMBER OF SEQUENCES: 82
 TITLE OF INVENTION: Botulinum Neurotoxin
 CURRENT APPLICATION DATA:
 ZIP: 94104
 COMPUTER READABLE FORM:
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent: Release #1.0., Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PC/TUS97/15394
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Ingolia, Diane E.
 REGISTRATION NUMBER: 40,027
 REFERENCE DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-0410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 43:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1526 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: other nucleic acid
 DESCRIPTION: /desc = "DNA"
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 108..1523

Query Match 49.4%; Score 662; 8; DB: 1; Length 1526;
 Best Local Similarity 68.6%; Prid. No. 4.2e-172;
 Matches 910; Conservative 0; Mismatches 412; Indels 0; Gaps 0;

PCT-US97-15394-43

QY 10 ATGGCCACAAATAACATTATCGGAAATTCCTGAACATATCATCTGGCTTACAAA 69
 Db 204 ATGTTAAATAATAATAGCGAATTATAATATATTCATAAATTAAAGATAAGA 263
 Qy 70 GACAACATCGATCGATCGTCGTTGGCTTAAGTGAAGTAGCAGGGTT 129
 Db 264 GATAATAATTAATGAGTATCGGATATGGCAAGGTATGATGGGTC 323
 Qy 130 GRACGTGATGACAAGAACCTGTCGAACGACTCTCGCTTAAGTCAAGTGGTT 189

Db 324 AGGTTAATGATAAAATCAATTAAATAACTGTCAGGATAATAGATAAGTC 383
 Qy 190 ACTAGAATCAGAACATCATCTCAACTCCGTATTCCTGGACTTCTCTGTTCTCTGG 449
 Db 384 ACTAAATTCAGATAATTATAATTAATAGTAGTGTTCCTTGATTTCAGCTTGG 443
 Qy 250 ATTTGATCCGAAATAAGAAGCAGCTCACGATTACATCACAAATGARAPACC 309
 Db 444 ATANGGATACCTAAATAATAGGAAATGATGATGATGATGATGATGATGATC 503
 Qy 310 ATCATCAACTGCATGAAATAACTCGTTGAGAGTCCTCCCGGTAACCGTATC 369
 Db 504 ATAATTAATGTGATGAAATAATTCAGGCGAAATAATAGGGTAATAGGATA 563
 Qy 370 ATCTGGACTCTGATGATCAGGAAATCTGTTACATGAAATCAGTATCTGATAACATC 429
 Db 564 ATAGGACCTTAATGATAATGGAAAACCAAATCAGTATTITGATAACATA 623
 Qy 430 CGTGAAGAACATCTGTTACATCAATCGCTGTTCTTCGTTACCATCACAATACCTG 489
 Db 624 AGAGAGATATATAGTATAATAATAGATGTTGAACTTACTAATATTGTTG 683
 Qy 490 AACATGCTTAAATCTATACTACGGGAAACTGGAACTTACCCACATCAACATC 549
 Db 684 GATATGCTTAAATTTATTTGGCAGCTTAAATGATATAAGATATA 743
 Qy 550 CGTGAAGTATCGGTAACCGTGAATCTCTCAACTGGAGGTGACATGATGCTTAC 609
 Db 744 GGAGAAGTATTGTTAATGGAAATCATTAATAGTGTGATGATGATGATACA 803
 Qy 610 CAGTCATCGGATAATTACTTCATCTCACAACCGAACACTGTCATGTCATATC 669
 Db 804 CAATTATTTGGGAAATAATTATGATTTATAGCATAATTAAATCAATAATT 863
 Qy 670 GAAGACGGACAGATGCAAGTCACTCCGATACTGAAAGACTCTGGGTAATCCG 729
 Db 864 AAAGGAGTATAAAATCAATCATATAGGATAACTTAATAGATTTGGGAAATCTT 923
 Qy 730 CTGATGTACACAAAGAAACTATATGTTCAATGCTGTTAAAGAGACTCTTACACCAA 789
 Db 924 TTAATGTTATAAGAAATTATATGTTAAATGCGGGATAAAATTTAA 983
 Qy 790 CTGAGAAAGAACGTCCTCGGTTGGAAATCTCGTCAACCCGAACTCT 849
 Db 984 CTAGTGAAAGATTTATGTTAGGAAATAATTAATGAAATTC 1043
 Qy 850 AAATCATCACACCCGGACCTTACATCGGAAAGTCATCTCCCTCGCAAACT 909
 Db 1044 AAATATATAATTTAGATTTATATGGGAAATAATTATAGAAGAGTC 1103
 Qy 910 AACCTTCAGTCATCAATGATGAACTGTCAGCTAAAGACTCATCTACTGGACTTC 969
 Db 1104 AAATTCAAUCAATAAAATGATGATTTAGTAAAGAGAATTTACATCTGTTG 1163
 Qy 970 TTCAACCTGATGAAATGGCGTATACACCTCAAGTCAATGTTACAGTACTC 1029
 Db 1164 GTACTTCACATGGAGTGGAGTATGCTTAAATTTAGGAAACGGAGAA 1223
 Qy 1030 AACGTTTCCGGCTCGGATCTCTGATTCGACAACTTACACCATCCGATCAA 1089
 Db 1224 AAATGTTTTATATAATGATGTTATATAAGCTTATAGCTTAAATTTAA 1283
 Qy 1090 GAATACGCGAACGCCGACCTTACTCTGGCAACTGCTGTTCAAGAAAGATGAAAGATCT 1149
 Db 1284 GAATATGAAACGSCCATCATATGTTGTTAAAGATGAAAGT 1343
 Qy 1150 ACTGACGAAATCGGTCCTGATCGGTATCCGTTCTACGAATCTGGTATCTGTTACGAA 1209
 Db 1344 ACTGATGATGATGAGTGGATTGATCGTGTTCAGTCTGTTACCTAA 1403
 Qy 1210 GAATACAAAGACTCTCTGCAATCCAAATGTAACGCAACCG 1269
 Db 1404 AAATATAAAGATTATTGTTATAAGTAAATGTTGTTACTAAAGGTAACCCA 1463

QY 1270 TACAACTGAACTGGTGCATTGGCAAGTCATCCGAAGGTTGGACCGAA 1329
Db 1464 TATAATCAAATTGGGAGTAATTGGCAGTTATCCTAAGATGAAGGTGGACTGAA 1523
QY 1330 TA 1331
Db 1524 TA 1525

Search completed: November 1, 2002, 08:15:27
Job time : 3301 secs

GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 07:16:43 ; Search time 18 Seconds

(without alignments)
1465.488 Million cell updates/sec

Title: US-09-910-186A-7

Perfect score: 1341

Sequence: 1 gaattccatcgccaaacaa.....ggaccgaaatgtaaagaattc 1341

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 10552 seqs, 9969721 residues

Total number of hits satisfying chosen parameters: 21104

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%, Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_NA_New:*

```
1: /cgn2_6_ptodata/1/pna/PCT_NEW_COMB_seq:*
2: /cgn2_6_ptodata/1/pna/US06_NEW_COMB_seq:*
3: /cgn2_6_ptodata/1/pna/US07_NEW_COMB_seq:*
4: /cgn2_6_ptodata/1/pna/US08_NEW_COMB_seq:*
5: /cgn2_6_ptodata/1/pna/US09_NEW_COMB_seq:*
6: /cgn2_6_ptodata/1/pna/US10_NEW_COMB_seq:*
7: /cgn2_6_ptodata/1/pna/US60_NEW_COMB_seq:*
```

Pred. No. is the number of results Predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	33.2		2.5	15645	6	US-10-085-198-111
c	32.6		2.4	2358	6	US-10-092-411A-1029
c	3.2		2.4	1854	6	US-10-092-411A-1175
c	4		2.4	2835	6	US-10-092-411A-1515
c	5		2.4	3061	6	US-10-092-411A-1685
c	6		2.4	6414	6	US-10-092-411A-1626
c	7		2.4	2211	6	US-10-092-411A-818
c	8		2.4	80246	5	US-09-728-552-4
c	9		2.3	1236	6	US-10-092-411A-284
c	10		2.3	1524	1	PCT-US02-05068-179
c	11		2.3	8451	6	US-10-092-411A-44
c	12		2.3	3558	6	US-10-092-411A-2439
c	13		2.3	3390	6	US-10-268-838-1
c	14		2.2	6219	6	US-10-240-454-20
c	15		2.2	1032	1	PCT-US02-12342-2
c	16		2.2	1149	1	PCT-US02-12342-1
c	17		2.2	1376	1	PCT-US02-12342-4
c	18		2.2	1437	1	PCT-US02-12342-3
c	19		2.2	1440	6	US-10-092-411A-1291
c	20		2.2	1287	6	US-10-092-411A-964
c	21		2.2	1752	6	US-10-240-454-27
c	22		2.2	537	6	US-10-092-411A-2727
c	23		2.2	1524	1	PCT-US02-05068-169
c	24		2.2	2567	6	US-10-264-237-395
c	25		2.2	3997	6	US-10-159-901-27
c	26		2.2	474	6	US-10-092-411A-1877

RESULT 1

; Sequence 111, Application US/10085198
; GENERAL INFORMATION:
; APPLICANT: Alsobrook et al.
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 2102-219
; CURRENT APPLICATION NUMBER: US/10/085,198
; PRIOR APPLICATION NUMBER: 60/271,646
; PRIOR FILING DATE: 2002-02-26
; PRIOR APPLICATION NUMBER: 60/276,401
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/311,981
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: 60/312,858
; PRIOR FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: 60/271,840
; PRIOR FILING DATE: 2001-02-27
; PRIOR APPLICATION NUMBER: 60/277,324
; PRIOR FILING DATE: 2001-03-20
; PRIOR APPLICATION NUMBER: 60/286,096
; PRIOR FILING DATE: 2001-04-21
; PRIOR APPLICATION NUMBER: 60/299,695
; PRIOR FILING DATE: 2001-06-20
; PRIOR APPLICATION NUMBER: 60/315,614
; PRIOR FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: 60/272,405
; PRIOR FILING DATE: 2001-02-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 653
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 111
; LENGTH: 15645
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-085-198-111

ALIGNMENTS

c	27	29.2	2.2	810	6	US-10-092-411A-2557
c	28	29.2	2.2	1074	6	US-10-092-411A-1568
c	29	29.2	2.2	1272	6	US-10-092-411A-2558
c	30	29.2	2.2	1332	6	US-10-092-411A-1289
c	31	29.2	2.2	1389	6	US-10-092-411A-1289
c	32	29.2	2.2	8238	6	US-10-240-454-43
c	33	29	2.2	832	6	US-10-240-454-535
c	34	29	2.2	1964	6	US-10-145-08A-441
c	35	28.8	2.1	1263	6	US-10-092-411A-968
c	36	28.8	2.1	1523	6	US-10-092-411A-1704
c	37	28.6	2.1	723	6	US-10-092-411A-2608
c	38	28.6	2.1	1539	1	PCT-US02-0568-113
c	39	28.6	2.1	2061	6	US-10-145-08A-44
c	40	28.4	2.1	942	6	US-10-092-411A-284
c	41	28.4	2.1	1347	6	US-10-092-411A-1309
c	42	28.4	2.1	1620	6	US-10-092-411A-2281
c	43	28.2	2.1	1194	6	US-10-092-411A-1551
c	44	28.2	2.1	1407	6	US-10-092-411A-1162
c	45	28.2	2.1	8168	6	US-10-240-454-23

Query Match 2.4%; Score 32; DB 6; Length 1854;
 Best Local Similarity 50.7%; Pred. No. 4.5;
 Matches 77; Conservative 0; Mismatches 75; Indels 0; Gaps 0;

Qy 183 CCGTGTACTCAAAATCAGAACATCTGGTACATCAATGCTGGTTCTC 467
 Db 880 CCATGATAAAGAAAATTGGAAATAAGGAACCATAAACCSAATTAATTTCGACCA 821

Qy 468 CGTATTACATACCAATAACCTGAAATCTACATCACGGTAAACGGCTACA 517
 Db 10129 CAGCAACGACAAACAGCAGTCAACAGCAACAGAACAGGA 10178

RESULT 2
 US-10-092-411A-1029/c
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 FILE REFERENCE: 032796-101
 CURRENT APPLICATION NUMBER: US-10/092,411A
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134, 001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: US 60/064, 964
 PRIOR FILING DATE: 1997-11-08
 PRIOR APPLICATION NUMBER: US 60/055, 779
 SEQ ID NO: 1029
 LENGTH: 2358
 TYPE: DNA
 ORGANISM: Staphylococcus epidermidis
 US-10-092-411A-1029/g

Query Match 2.4%; Score 32.6; DB 6; Length 2358;
 Best Local Similarity 53.5%; Pred. No. 3.5;
 Matches 68; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

Qy 369 CATCTGGAACCTGATGATAACAACGGTAAGAACCAAATCTGTTACATTC 428
 Db 703 CAACAGATCTCGTCAATATAGTTCTGATGGGATGGTCAATGAAATAC 644

Qy 429 CGGTGAAGACATCTGATCATCATCAATCGTGGTCTGTTACATCACCAATACT 488
 Db 643 CATTGAAATCTGTCATATTAGCTTACCGGATAACATGGATCATTCITACTG 584

Qy 489 GAACT 495
 Db 583 TTAACAT 577

RESULT 3
 US-10-092-411A-1175/c
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 FILE REFERENCE: 032796-101
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134, 001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: US 60/064, 964
 PRIOR APPLICATION NUMBER: US 60/055, 779
 PRIOR FILING DATE: 1997-08-14
 NUMBER OF SEQ ID NOS: 5676
 LENGTH: 1854

Query Match 2.4%; Score 32; DB 6; Length 2835;
 Best Local Similarity 49.4%; Pred. No. 5.3;
 Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

Qy 935 TCGTAGCTAAAGAACATCATCTACCTGGACTCTCAACCTGAATGGCTG 994
 Db 1639 TCGGACTCAAAATTAGTCAACCTCAGAAAGTCATAAGTCACASGTGAGGAG 1580

Qy 995 TATACACCACAAAGTACTCAAGAAAGAAGAAAGCTTCTGGCTCCGATCTCTG 1054
 Db 1579 TCAAAAGTGAATAAGCICATAGCGATGTCGAAAGACAAAGCTTCAACATCAACA 1520

RESULT 4
 US-10-092-411A-1515/c
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 FILE REFERENCE: 032796-101
 CURRENT APPLICATION NUMBER: US-10/092,411A
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134, 001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: US 60/064, 964
 PRIOR FILING DATE: 1997-11-08
 PRIOR APPLICATION NUMBER: US 60/055, 779
 SEQ ID NO: 1515
 LENGTH: 2835
 TYPE: DNA
 ORGANISM: Staphylococcus epidermidis
 US-10-092-411A-1515

Query Match 2.4%; Score 32; DB 6; Length 2835;
 Best Local Similarity 49.4%; Pred. No. 5.3;
 Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

Qy 935 TCGTAGCTAAAGAACATCATCTACCTGGACTCTCAACCTGAATGGCTG 994
 Db 1639 TCGGACTCAAAATTAGTCAACCTCAGAAAGTCATAAGTCACASGTGAGGAG 1580

Qy 995 TATACACCACAAAGTACTCAAGAAAGAAGAAAGCTTCTGGCTCCGATCTCTG 1054
 Db 1579 TCAAAAGTGAATAAGCICATAGCGATGTCGAAAGACAAAGCTTCAACATCAACA 1520

RESULT 5
 US-10-092-411A-1685/c
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 FILE REFERENCE: 032796-101
 CURRENT APPLICATION NUMBER: US-10/092,411A
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134, 001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: US 60/064, 964
 PRIOR FILING DATE: 1997-11-08
 PRIOR APPLICATION NUMBER: US 60/055, 779
 SEQ ID NO: 1175
 LENGTH: 1854
 TYPE: DNA
 ORGANISM: Staphylococcus epidermidis
 US-10-092-411A-1155

NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 1685
LENGTH: 3561
TYPE: DNA
ORGANISM: *Staphylococcus epidermidis*
US-10-092-411A-1685

Query Match Score 32; DB 6; Length: 3561;
Best Local Similarity 49.4%; Pred. No. 5.8%; Indels 0; Gaps 0;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

Q935 TCGTAGTAAAGAACATCATCTACGGACTCTCAACCTGAAATCAGGAATGGCGCTG 994
D935 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
D935 2435 TCGGACTCAACATCTACGGACTCTCAACCTGAAATCAGGAATGGCGCTG 2376

Q995 TATACCCATCACAGTACTCTCAAGAAARAGAGAAAGACTTTCTGGCTCCGATCTCTG 1054
D995 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
D995 2375 TCAACAGTAAAGAACATCTCAAGGAGTCGACAGGACAAAGGTTCAGATCACACA 2316

Q1055 ATTCGGACAACTCTACACCATCCAGATAAAGMATAAGCAGAC 1102
D1055 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
D1055 2315 AGCGGGTGACATCGGAGTGCATCACATCAACGGTGTGAGGSGAC 2268

RESULT 6
US-10-092-411A-1626
Sequence 1626; Application US/10092411A
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS FILE REFERENCE: 032796-101
CURRENT APPLICATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 2002-03-07
PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 1666
LENGTH: 6414
TYPE: DNA
ORGANISM: *Staphylococcus epidermidis*
US-10-092-411A-1626

Query Match Score 32; DB 6; Length: 6414;
Best Local Similarity 49.4%; Pred. No. 7.3%; Indels 0; Gaps 0;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

Q935 TCGTAGTAAAGAACATCATCTACGGACTCTCAACCTGAAATCAGGAATGGCGCTG 994
D935 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
D935 3610 TCGGACTCAACATCTACGGACTCTCAACCTGAAATCAGGAATGGCGCTG 3669

Q995 TATACCCATCACAGTACTCTCAAGAAAGAGAAAGACTTTCTGGCTCCGATCTCTG 1054
D995 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
D995 3670 TCAACAGTAAAGTACGGACTCTCAACCTGAAATCAGGAATGGCGCTG 3729

Q1055 ATTCGGACAACTCTACACCATCCAGATAAAGMATAAGCAGAC 1102
D1055 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
D1055 3730 AGCGGGTGACATCGGAGTGCATCACATCAACGGTGTGAGGSGAC 3777

RESULT 7
US-10-092-411A-818/C
Sequence 818; Application US/10092411A
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS FILE REFERENCE: 032796-101
CURRENT APPLICATION NUMBER: US/10/092,411A

RESULT 9
S-0-092-411A-284/c
Sequence 284, Application US/10092411A
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEARIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
FILE REFERENCE: 032796-101
CURRENT APPLICATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 2002-03-07
PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
SEQ ID NO: 284
LENGTH: 1236
TYPE: DNA
ORGANISM: Staphylococcus epidermidis
S-10-092-411A-284

	Query Match	Score	DB	Length
Best Local Similarity	46.5%	Pred. No.	6.9;	
Matches 100% ; Conservative	0; Mismatches	115; Indels	0;	Gaps
Qy	261 GAAATACAAGAACGACGGPATCCAGATACTCACCATGAACTACACCATTCAACTG 320	Ddb		
Qy	442 GACCAAGTAAACGACTAAACCCATTAAACTCTTAACTACTCTGAATTGCGCTTAATTCCTT 383	Ddb		
Qy	321 CATGAGAAATAACTCTGGTTGGAGATCTCCATCGGGTAACCGTATCATTGGACTCT 380	Ddb		
Qy	382 CATCGTATCTAGTTTCTGTAAATTCATAAGAATTTCAGTTCAAAGTTGTCTTT 323	Ddb		
Qy	381 GATCGTATCAACGTTAAAGCCRAATCTTATCTCCGAAATCAAACATCCGTAAGACAT 440	Ddb		
Qy	322 TTGATATAATGATGCCCAAGTATCATTTCTCGTGCAACTGATTTAGTACATATG 263	Ddb		
Qy	441 CTCTGATACATCAATGCTGGTTCTCTTCA 475	Ddb		
Qy	262 CTTCGACTCATCACGACTTTTACAACCTCACTA 228	Ddb		

RESULT 10
PCT-US2-05068-179
Sequence 179, Application PC/TUS0205068
GENERAL INFORMATION:
APPLICANT: Diversa Corporation
TITLE OF INVENTION: ENYMES HAVING ALPHA AMYLASE ACTIVITY
FILE REFERENCE: 03010-108W01
CURRENT APPLICATION NUMBER: PCT/TUS02/05068
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: US 60/270,495
PRIOR FILING DATE: 2001-02-01
PRIOR APPLICATION NUMBER: US 60/270,496
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: US 60/291,122
PRIOR FILING DATE: 2001-05-14
NUMBER OF SEQ ID NOS: 321
SOFTWARE: Fast-SEQ for Windows Version 4.0
SEQ ID NO: 179
LENGTH: 1524
TYPE: DNA
ORGANISM: Environmental
PCT-US02/05068-179

	Query Match	Score	DB	Length
Best Local Similarity	46.3%	Pred. No.	8.4;	
Matches 101% ; Conservative	0; Mismatches	117; Indels	0;	Gaps
Qy	654 GCTCTAGTCACATATCGAAGAACGGTACAAAGATCCGGTCTACTCCGAAATACCTGAAAGA 713			


```

; FEATURE: OTHER INFORMATION: mutant #1, C-terminally truncated variant of
; OTHER INFORMATION: human endothelial differentiation G-protein
; OTHER INFORMATION: coupled receptor (GPCR) 1 (BDG1)
FEATURE:
; NAME/KEY: CDS
; LOCATION: (9)..(1031)
; OTHER INFORMATION: mutant #1 human EDG1
PCT-US02-12342-2

Query Match Score 29.8; DB 1; Length 1032;
Best Local Similarity 46.4%; Pred. No. 13; Mismatches 0; Gaps 0;
Matches 97; Conservative 0; Indels 0; Gaps 0;

Qy 315 CAACTCGATGAAAGATAACTCTGGTTGGAAAGATCTCCATCCGTAACCGTATCATCTG 374
Db 62 CTACCTCAACTATGATATCATGTCGGCATTAACAATTACACGGGAAGCTGAAATACAG 121
Qy 375 GACTCTGATCGATGATCAACCGTAAGACCCAATCTGTATTCTCGATAACACATCCGTGA 434
Db 122 CGCGAACAGGAGAACGGATTAAACTGACCTCGGTGTGTCATTCATCTGCTGCTT 181
Qy 435 AGACATCTGAAATACATCAAATGGCTTACCATCACCAATAACCTGAAACA 494
Db 182 TATCATCCCTGGAGACATTTGNCATTCGTCATTTGGAACATTCAGAATTCACCG 241
Qy 495 TGCTAAARTCTACATCAACGGTAACCTG 523
Db 242 ACCCATGTTACTATTTATGGCAATCTGG 270

```

Search completed: November 1, 2002, 08:17:49
 Job time : 151 secs

GenCore version 5.1.3
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM protein - Protein search, using sw model

Run on: November 1, 2002, 07:18:23 ; Search time 26 Seconds
(without alignments)
497.926 Million cell updates/sec

Title: US-09-910-186A-8
2350
Perfect score:
Sequence: 1 MANKYSEILNNILNLRYK.....YNLKLGCNQFIPKDEGWE 440

Scoring table: BILOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*

1: /cnr2/6/ptodata/1/iaa/5A_COMBO_pep:*

2: /cnr2/6/ptodata/1/iaa/5B_COMBO_pep:*

3: /cnr2/6/ptodata/1/iaa/6A_COMBO_pep:*

4: /cnr2/6/ptodata/1/iaa/6B_COMBO_pep:*

5: /cnr2/6/ptodata/1/iaa/PCTUS_COMBO_pep:*

6: /cnr2/6/ptodata/1/iaa/bactilles1_pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the total score distribution and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB ID	Description	SUMMARIES	
1	1667	70.9	1169	4	US-09-255-829-20		
2	831.5	35.4	438	1	US-09-480-604A-23	Sequence 20, Appl	
3	831.5	35.4	438	2	US-08-405-496A-23	Sequence 23, Appl	
4	831.5	35.4	438	3	US-08-915-136-23	Sequence 23, Appl	
5	831.5	35.4	462	1	US-08-480-604A-26	Sequence 26, Appl	
6	831.5	35.4	462	2	US-08-405-496A-26	Sequence 26, Appl	
7	831.5	35.4	462	4	US-08-915-136-26	Sequence 26, Appl	
8	831.5	35.4	1296	2	US-08-480-604A-28	Sequence 28, Appl	
9	831.5	35.4	1296	4	US-08-405-496A-28	Sequence 28, Appl	
10	831.5	35.4	1296	5	US-08-915-136-28	Sequence 28, Appl	
11	595	25.3	452	1	US-07-618-312A-28	Sequence 2, Appl	
12	594	25.3	452	1	US-08-280-228-2	Sequence 2, Appl	
13	594	25.3	452	1	US-07-618-312A-4	Sequence 4, Appl	
14	594	25.3	452	1	US-08-280-228-4	Sequence 4, Appl	
15	594	25.3	618	1	US-08-668-38A-5	Sequence 5, Appl	
16	594	25.3	853	4	US-08-913-880C-17	Sequence 17, Appl	
17	594	25.3	858	4	US-08-113-880C-16	Sequence 16, Appl	
18	594	25.3	860	4	US-08-913-880C-15	Sequence 15, Appl	
19	594	25.3	862	4	US-08-913-880C-14	Sequence 14, Appl	
20	594	25.3	865	4	US-08-913-880C-13	Sequence 13, Appl	
21	594	25.3	866	4	US-08-913-880C-12	Sequence 12, Appl	
22	594	25.3	874	4	US-08-913-880C-11	Sequence 11, Appl	
23	594	25.3	875	4	US-08-913-880C-10	Sequence 10, Appl	
24	594	25.3	1315	4	US-08-110-786A-8	Sequence 1, Appl	
25	575	24.5	452	1	US-08-446-114A-22	Sequence 8, Appl	
26	169.5	7.2	140	4	US-08-446-114A-22	Sequence 2, Appl	
27	163	6.9	2391	2	US-08-446-855A-2	Sequence 20, Appl	

RESULT 1
US-09-255-829-20
; Sequence 20, Application US/09255829
; Patent No. 6461617
; GENERAL INFORMATION:
; APPLICANT: Shone, Clifford Charles
; APPLICANT: Quinn, Conrad Padraig
; APPLICANT: Foster, Keith Alan
; TITLE OF INVENTION: Recombinant Toxin Fragments
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STRINE, KESSLER, GOLDSTEIN, & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, NW, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/255,829
; FILING DATE: 23-FEB-1999
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB97/02273
; FILING DATE: 22-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/782,893
; FILING DATE: 27-DEC-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: EDMOND, ROBERT W.
; REGISTRATION NUMBER: 32,893
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-371-2560
; TELEFAX: 202-371-2540
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1169 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-255-829-20
Query Match Score 1667; DB 4; Length 1169;
Best Local Similarity 99.7%; Pred. No. 1.7e-121;
Matches 317; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1	MANKYSEILINN1LNRYKDNNLLDLSGYAKVEYDGVELNDKNQFKLTSSANSKIRY	60
852	MENKYSEILINN1LNRYKDNNLLDLSGYAKVEYDGVELNDKNQFKLTSSANSKIRY	911
61	TQNQNI1NSVFLDSFWIRPKYKNDGIONYINEYTINCMKNNSGWKISLRGNRI	120
912	TQNQNI1NSVFLDSFWIRPKYKNDGIONYINEYTINCMKNNSGWKISLRGNRI	971
121	IWTLDINGRTKSVEFEYNIREDTSEYINRWFETITNLNNAKLYINGLESNTDKDI	180
972	IWTLDINGRTKSVEFEYNIREDTSEYINRWFETITNLNNAKLYINGLESNTDKDI	1031
181	REVINGE1TFKLQDIDTQF1WMKFSIETELSOSENIBERYKQSYSEYLDFWGNP	240
1032	REVINGE1TFKLQDIDTQF1WMKFSIETELSOSENIBERYKQSYSEYLDFWGNP	1091
241	LMYNKEYMAGNAGNKSYKLKDPSGEILRSKQNQSKYINRDLYGEKEFIRRKS	300
1092	LMYNKEYMAGNAGNKSYKLKDPSGEILRSKQNQSKYINRDLYGEKEFIRRKS	1151
301	NSQSINDIVKEDIYL	318
1152	NSQSINDIVKEDIYL	1169

2 480-604A-23

Application US/08480504A

Sequence 23, Application No. 5736139

ENTRANT INFORMATION:

APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.

APPLICANT: PADHYE, NISHA V.

APPLICANT: FIRCA, JOSEPH R.

APPLICANT: STAFFORD, DOUGLAS C.

TITLE OF INVENTION: VACCINE AND ANTIBODY FOR PREVENTION OF C

NUMBER OF SEQUENCES: 32

ORRESPONDENCE ADDRESS:

ADDRESSSEE: MEDDLEN & CARROLL, LLP

STREET: 220 MONTGOMERY STREET, SU

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY DISK

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentent Release #1.0,

SURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/480,604

FILING DATE: 07-JUN-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/422,711

FILING DATE: 14-APR-1995

RRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496

FILING DATE: 16-MAR-1995

RRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994

RRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/161,907

FILING DATE: 02-DEC-1993

RRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/985,321

FILING DATE: 04-DEC-1992

RRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791

FILING DATE: 31-OCT-1998

```

NAME: INGOLIA, DIANE E.          REGISTRATION NUMBER: 40, 027
REFERENCE/DOCKET NUMBER: OPHD-01763
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEX/FAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 438 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-480-604A-23

Query Match      Score 831.5;  DB 1;  Length 438;
Best Local Similarity 40.0%; Pred. No. 4.7e-57;
Matches 180;  Conservative 83;  Mismatches 150;  Indels 37;  Gaps 0

QY  4 KYNSELINNITLNRKYKDNLLTILSGLCAYKVEYDGVELN'-DKKQFKTSSANSKIRTY 61
Db 10 EYKRNKRNLYEHHSHLASKINQSKVNNPDPDKKQIQLENLESSKIEV 69

QY 62 QNQNLIPNSVFLDESVPIRKYKNDGIONYTHNEYTIINCMKMNQSKWIKSRGNRRI 121
Db 70 LKAVATVNSYENFTSFPIRKYFN -- SISLNNEYTTINCMERNNSGKVKSYNEYGEI 126

QY 122 WTLDINGTKSVFEEYNIREDISEYINRWFVTTINN-LNNAKIYIINGKLESTEIDKI 180
Db 127 WTLQDQEIKQRVYFQSMINSDY-INRWTIVNRLANSKYINGLIDQXPISNL 186

QY 181 REVINGAEITPKLQDIOITOFIWKAFPSINTELSSNTERYKIQSEYLDFWGP 24.0
Db 187 GNTHASNNTMFKLQGCRDTHYLWIKYENLKEKLNEKTDLYDNQNSNGLKDWFQGY 246

QY 241 LDYNREYYMENAGRNNSYTKLK-----DSPVGEILTRSKYQNQSKVINYRDLYIG 291
Db 247 LQDYDPMYTMNLPKQYDVMVNGIRGMYMLKGPROGSVMTVNSS-----LARG 299

QY 292 EKFTIRRKSNQSINTDIVKEDTYLDFENINQEWRYVITYKFKEKEEYLFLAPISDSD 351
Db 300 TFKIJKYASGN - KDNIVRNNDRVIYVVKNEPLATNAQAGEVKLSAEIFPDVG 357

QY 352 ELYNTQIOKEYDEQP-TYSQCOLFKKDBESTDEIGLIGHFEEYSGIVFEYKDFCISK 410
Db 358 NLSQVYVMSKNDGIGTWCXKM - NLQDNNGNDIGFIGFHOFNNVIA-----KLVASN 407

QY 411 WYLKEYVKRKYNNALIGCNWQFPIKDEGWTE 440
Db 408 WYNRQIERS - SRTIGCSWEFIVDDGWE 435

RESULT 3
US-08-405-496A-23
Sequence 23, Application US/08405496A
Patent No. 5019665
GENERAL INFORMATION:
APPLICANT: WILLIAMS, JAMES A.
TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
TITLE OF INVENTION: NEUROTOXIN
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentent Release #1.0, Version #1.30
ORIGINATOR: Advanced Patent Development

```

APPLICATION NUMBER: US/08/405,496A
 FILING DATE: 16-MAR-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OHD-01308
 TELECOMMUNICATION INFORMATION:
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 23:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 438 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-05-496A-23

Query Match 35.4%; Score 831.5; DB 2; Length 438;
 Best Local Similarity 40.0%; Pred. No. 4.7e-57;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNSEILNNTIILRKDNNTLIDGGYGAKVEVDGVELN-^{-DKNOFLKTSSANSKRV}T 61
 Db 10 ETKNIKNTSTLNRLRESNHILDLRASYKINISKVNFDPIDENIQLENLESSKIEVI 69
 QY 62 QNONIIFNSVLDFTSFWRIPKVKNDGLIONYIHNEYTTINOMKNGWKSITRGNRII 121
 Db 70 LKNAVYNSMENFSWIRIPKFN--SISLNNEYTTINCMENNSWKVLYNGEII 126
 QY 122 WTLJDINGTKTKEVFFENYVIRDISEYINRAFFETITNN-LNNAKTYINGKLESNTDKDI 180
 Db 127 WTLQDTQEIKQVVFYSQM-INSDYINRNFLFUTTINRNRLNSNTYINGRLDQKPSNL 186
 QY 181 LMYNEKYMFAGKNKSYIKLRK-----DSPGEILTRSKYQNNSKTYNRDLYTG 240
 Db 187 GNTHASNNIMFKDGDRTYIWIKYFNLFDEKNEKEKDLYDNOQSNTGILKDFNSDY 246
 Qy 241 LMYNEKYMFAGKNKSYIKLRK-----DSPGEILTRSKYQNNSKTYNRDLYTG 291
 Db 247 LQYDPKYMLNLYDPKYQYDYNNGLRGYMXLKGRGSMTNTYINSS-----LVRG 299
 Qy 292 EKFIRRSNSQSINDDITVKEKDYTLDFPNLNQERVYKFKKEEEKLFLAPISDSD 351
 Db 300 TKFLIKKTAGN-KDNLVRNNDRVINVVKNKEVLATNASQAVEKTSALEIPDVG 357
 Qy 352 ELYNTIQKEYDEQ-TYSCQLEKDEESTDEIGLIGHTRYEESGIVFEYKQYFCISK 410
 Db 358 NLSQYVYNSKSKNDQGINKCKRM--NQDNNNGNDIGFIGHQFNNTA-----KLVASN 407
 Qy 411 WYLKEVKRPYKPNLKGNCWQFLPKDQEWTE 440
 Db 408 WYRQDIES-SRTLGASWEFPVODGWGE 435

RESULT 4
 US-08-915-136-23
 ; Sequence 23, Application US/08915136
 ; Patent No. 6290930
 ; GENERAL INFORMATION:
 ; APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.
 APPLICANT: PADHYE, NISHA V.
 APPLICANT: FIRCA, JOSEPH R.
 APPLICANT: STAFFORD, DOUGLAS C.
 TITLE OF INVENTION: VACCINE AND ANTIOTOXIN FOR TREATMENT AND
 TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/915,136
 FILING DATE:
 CLASSIFICATION:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: 08/480,604
 FILING DATE:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OHD-01308
 TELECOMMUNICATION INFORMATION:
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 23:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 438 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-915-136-23

Query Match 35.4%; Score 831.5; DB 4; Length 438;
 Best Local Similarity 40.0%; Pred. No. 4.7e-57;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNSEILNNTIILRKDNNTLIDGGYGAKVEVDGVELN-^{-DKNOFLKTSSANSKRV}T 61
 Db 10 ETKNIKNTSTLNRLRESNHILDLRASYKINISKVNFDPIDENIQLENLESSKIEVI 69
 Qy 62 QNONIIFNSVLDFTSFWRIPKVKNDGLIONYIHNEYTTINOMKNGWKSITRGNRII 121
 Db 70 LKNAVYNSMENFSWIRIPKFN--SISLNNEYTTINCMENNSWKVLYNGEII 126
 Qy 122 WTLJDINGTKTKEVFFENYVIRDISEYINRAFFETITNN-LNNAKTYINGKLESNTDKDI 180
 Db 127 WTLQDTQEIKQVVFYSQM-INSDYINRNFLFUTTINRNRLNSNTYINGRLDQKPSNL 186
 Qy 181 LMYNEKYMFAGKNKSYIKLRK-----DSPGEILTRSKYQNNSKTYNRDLYTG 240
 Db 187 GNTHASNNIMFKDGDRTYIWIKYFNLFDEKNEKEKDLYDNOQSNTGILKDFNSDY 246
 Qy 241 LMYNEKYMFAGKNKSYIKLRK-----DSPGEILTRSKYQNNSKTYNRDLYTG 291
 Db 247 LQYDPKYMLNLYDPKYQYDYNNGLRGYMXLKGRGSMTNTYINSS-----LVRG 299
 Qy 292 EKFIRRSNSQSINDDITVKEKDYTLDFPNLNQERVYKFKKEEEKLFLAPISDSD 351
 Db 300 TKFLIKKTAGN-KDNLVRNNDRVINVVKNKEVLATNASQAVEKTSALEIPDVG 357
 Qy 352 ELYNTIQKEYDEQ-TYSCQLEKDEESTDEIGLIGHTRYEESGIVFEYKQYFCISK 410
 Db 358 NLSQYVYNSKSKNDQGINKCKRM--NQDNNNGNDIGFIGHQFNNTA-----KLVASN 407
 Qy 411 WYLKEVKRPYKPNLKGNCWQFLPKDQEWTE 440
 Db 408 WYRQDIES-SRTLGASWEFPVODGWGE 435

RESULT 4
 US-08-915-136-23
 ; Sequence 23, Application US/08915136
 ; Patent No. 6290930
 ; GENERAL INFORMATION:
 ; APPLICANT: KINK, JOHN A.

187 GNTIASSNNIMEKLDGCRDTHRYIWKYFNLFDELNEKEIKLYDNGNSGLKDFWGDY 246
 241 LMNREKYYMENAGNNSYSTLKK-----DSPVGELDTASKYRANSKTYNRLIG 291
 QY 247 LYDKFYYMLNDPKNKYDVNNVIGRYMLKGPRSVMNTNLNS-----LYRG 299
 Db 292 EKFIRAKSNQSINDIVKEDTYLDFENNQEWRYTYYKFKBEEKFLAPISDSD 351
 QY 300 TKFIKYAGN-RDNIVRNNDRVINVVKRKEYRATNSQAGEKISALEPDVG 357
 Db 352 ELYNTIQKEYDEQP-TYSQLCLFKKDESTDEGLIGIHRFYESGIVFEEYKDFCISK 410
 Db 358 NLSQVYVMKSRSNDQITNCRM-NLQDRNGNDIGFHFQNNIA-----KLVASN 407
 Qy 411 WYLKEYKRKYNIKLGNCNQEIPKDEGNE 440
 Db 408 WYNRQTERS-SRTLGCSWEFIPVVDGNGE 435
 RESULT 5
 US-08-480-604A-26
 Sequence 26 Application US/08480604A
 Patent No. 57439
 GENERAL INFORMATION:
 APPLICANT: KINK, JOHN A.
 APPLICANT: THALLEY, BRUCE S.
 APPLICANT: PADIVE, NISHA V.
 APPLICANT: FIRKA, JOSEPH R.
 APPLICANT: STAFFORD, DOUGLAS C.
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
 PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESS: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/480,604A
 FILING DATE: 07-JUN-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/422,711
 FILING DATE: 14-APR-1995
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 26:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 402 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-480-604A-26
 Query Match 35.4%; Score 831.5; DB 1; Length 462;
 Best Local Similarity 40.0%; Pred. No. 5e-57;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;
 Best Local Similarity 40.0%;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;
 Query 4 KYNSEILNITLNURYKDNNLIDSGYAKVEYDGVELN-DKNUOFKLTSANSKIRVT 61
 Db 34 EYIKNINTSILNURYERHNLLDSRASKINGSKVNFDPLDKNQIOLNLESSKIEVI 93
 Qy 62 QNQNITFNSVFLDESVSWIRPKYKNDGIONYKHNEYTIINCMMKNSGWKISTGRNRRI 121
 Db 94 LKNAVYNSMYENSTSWSIRPKYFN--SISLNNEYTINCMMENSGHRSVSLNGEII 150
 Qy 122 WTLDINGTKTSVSEFFNIRESEYINWFETITN-LNAAK11NGKLESNNDIKDI 180
 Db 151 WTLDQTQEIKQRVYKVSQMIN-SDYRNWIEVTUNRNLAISKYTINGRUDQPKISNL 210
 Qy 181 REVTAANGEITFKLQDSDIDQTFTMKPSIFNTLSSNIEFERYKIOSYSPYLKDFWGNP 240
 Db 211 GNHASNINMEKLDGCRDTHRYIWKYNLNDQNSNQSTLKDFWGDY 270
 Qy 241 LMNKEYYMENAGNRSYIKLK-----DSPYGBLRPSKYNQNSKTYNRLIG 291
 Db 271 LQDXPYMMNLNPENKYDVNNVIGRYMLKGPRGSVMTNLYNS-----LYRG 323
 Qy 292 EKFIRRKNSQSINDIVKEDTYLDFENNQEWRYTYYKFKBEEKFLAPPSDSD 351
 Db 324 TKFIKYAGN-KDNIVRNNDEVINVVKNKEYRATNSQAGVEKILSALE-PDVG 381
 Qy 352 ELYNTIQKEYDEQP-TYSQCLLFFKDEESTDEGLIGIHRFYESGIVFEEYKDFCISK 410
 Db 382 NLSQVYVMKSRSNDQITNCKM-NLQDNGNDGFIFGHQFNNA-----KLYASN 431
 RESULT 6
 US-08-405-496A-26
 Sequence 26, Application US/08405496A
 Patent No. 5919665
 GENERAL INFORMATION:
 APPLICANT: WILLIAMS, JAMES A.
 TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
 NUMBER OF SEQUENCES: 30
 CORRESPONDENCE ADDRESS:
 ADDRESSSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: USA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0., Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/480,604A
 FILING DATE: 07-JUN-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/422,711
 FILING DATE: 14-APR-1995
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01308
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 397-8338
 TELEFAX: (415) 397-8410
 SEQUENCE CHARACTERISTICS:
 LENGTH: 462 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-405-496A-26

Query Match 35.4%; Score 831.5; DB 2; Length 462;
 Best Local Similarity 40.0%; Pred. No. 5e-57;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

Qy 4 KYNSEIINNITILNLYKDNNLIDLSGAGKAVEYDGVELN--DKNQPLTSSANSKIRVT 61
 Db 34 EYKNIINTSLNLYESENLLDLSRASKINGSKVNFDPIDKQNQTLQENLESSKEVI 93

Qy 62 QNQNQTSVLDFSWTRIPKYKNDGTONYKTYEYTINCMKNSGWKISITGRNRI 121
 Db 94 LKNAYINSMENFSWTRIPKYN--SISINNETTINMENNSGWKSYLNGBII 150

Qy 122 WTLIDINGKTSVFFYNIREDISYEYINRWFVFYLTNN-LNNAKIYNGKLESNTDKDI 180
 Db 151 WTLQDQEIKORVVPYSQMINISDYNRWFVTTNNRLNNSKIYNGRLIDQKPISNL 210

Qy 181 REVITANGELIKLQDIDPQTIMKYSFENTELSOISIEERYKIQSYSEYLKDFFGNP 240
 Db 211 GNIHASNNIMKQLGDGRDTYIWKFNFQKELNEKEIYDQNLQNSGLKDFFGDY 270

Qy 241 LMNKKEYMFRAKGNSKSYIKKK-----DSPVGEFLTRSKYQNSKSYINYRDYIG 291
 Db 271 LQDKPYMLNYDPKPKYDVNNVNGIRGMYLKSPRSYMTNTYLLNS-----LYRG 323

Qy 292 ERFITRKNSGSINNDIVREDDYDYLDFENLNQWRVRYTKKEEEKFLFLAPISDSD 351
 Db 324 TKEIIKKYASGN--KDNTVNNDRTYINVVKNEYRLATNAQSAGVKILSALEPDVG 381

Qy 352 EYNTQYDKEYDEOPYDQFLKDFKDEETDETGLIGTHRFESGIVFEYYKDYFCISK 410
 Db 382 NILSQVWMSKNDQGTINKCKM--NLQDNGNDLGFIGHQFNIA-----KLVASN 431

Qy 411 WYLKEYKRKPYKLNKGCONWOTPKDGEWTE 440
 Db 432 WNRQIERS--SRTLGCSWEFIPVDDFGWGE 459

RESULT 7
 US-08-915-136-26 Sequence 26, Application US/08915136
 ; General Information:
 ; Patent No. 6209360
 ; Inventor:
 ; KINK, JOHN A.
 ; Applicant:
 ; THALLEY, BRUCE S.
 ; Applicant:
 ; PADHUE, NISHA V.
 ; Applicant:
 ; FIRCA, JOSEPH R.
 ; Applicant:
 ; STAFFORD, DOUGLAS C.
 ; Title of Invention: VACCINE AND ANTITOXIN FOR TREATMENT AND

TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: FLOPPY DISK
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/915.136
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/480, 604
 FILING DATE:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REREFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 397-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 26
 SEQUENCE CHARACTERISTICS:
 LENGTH: 462 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-915-136-26

Query Match 35.4%; Score 831.5; DB 4; Length 462;
 Best Local Similarity 40.0%; Pred. No. 5e-57;
 Matches 93; Mismatches 150; Indels 37; Gaps 10;

Qy 4 KYNSEIINNITILNLYKDNNLIDLSGAGKAVEYDGVELN--DKNQPLTSSANSKIRVT 61
 Db 34 EYKNIINTSLNLYESENLLDLSRASKINGSKVNFDPIDKQNQTLQENLESSKEVI 93

Qy 62 QNQNQTSVLDFSWTRIPKYKNDGTONYKTYEYTINCMKNSGWKISITGRNRI 121
 Db 94 LKNAYINSMENFSWTRIPKYN--SISINNETTINMENNSGWKSYLNGBII 150

Qy 122 WTLIDINGKTSVFFYNIREDISYEYINRWFVFYLTNN-LNNAKIYNGKLESNTDKDI 180
 Db 34 EYKNIINTSLNLYESENLLDLSRASKINGSKVNFDPIDKQNQTLQENLESSKEVI 93

Qy 181 REVITANGELIKLQDIDPQTIMKYSFENTELSOISIEERYKIQSYSEYLKDFFGNP 240
 Db 34 EYKNIINTSLNLYESENLLDLSRASKINGSKVNFDPIDKQNQTLQENLESSKEVI 93

Qy 241 LMNKKEYMFRAKGNSKSYIKKK-----DSPVGEFLTRSKYQNSKSYINYRDYIG 291
 Db 62 QNQNQTSVLDFSWTRIPKYKNDGTONYKTYEYTINCMKNSGWKISITGRNRI 121
 Qy 292 ERFITRKNSGSINNDIVREDDYDYLDFENLNQWRVRYTKKEEEKFLFLAPISDSD 351
 Db 94 LKNAYINSMENFSWTRIPKYN--SISINNETTINMENNSGWKSYLNGBII 150

Qy 352 EYNTQYDKEYDEOPYDQFLKDFKDEETDETGLIGTHRFESGIVFEYYKDYFCISK 410
 Db 34 EYKNIINTSLNLYESENLLDLSRASKINGSKVNFDPIDKQNQTLQENLESSKEVI 93

Qy 411 WYLKEYKRKPYKLNKGCONWOTPKDGEWTE 440
 Db 122 WTLIDINGKTSVFFYNIREDISYEYINRWFVFYLTNN-LNNAKIYNGKLESNTDKDI 180
 Qy 432 WNRQIERS--SRTLGCSWEFIPVDDFGWGE 459
 Db 151 WTLQDQEIKORVVPYSQMINISDYNRWFVTTNNRLNNSKIYNGRLIDQKPISNL 210

Qy 181 REVITANGELIKLQDIDPQTIMKYSFENTELSOISIEERYKIQSYSEYLKDFFGNP 240
 Db 211 GNHAISNNIMEKLDGCRDTYIWKFNFQKELNEKEIYDQNLQNSGLKDFFGDY 270

Qy 241 LMNKKEYMFRAKGNSKSYIKKK-----DSPVGEFLTRSKYQNSKSYINYRDYIG 291

Db 271 LQYDKPYMLNLYDPNKTYVDVNNVGIRGYMLKGPRGSVMTNIYLNSS-----LYRG 323
 Db 292 EKFIRKRSNSQSTNDIVRKEDYYLDFFNLNCENRYTYKFKEEKFLAPISD 351
 Qy 324 TKFIIKYASGN - KDNIVRNDRVYNNVVKRETLATASQAVEKILSAEPIPVG 381
 Db 352 ELYNTIQUIKEYDEOP - TYSQCLLKKDEESTEIGLIGHRPFESGIVFEEYKDYFCISK 410
 Qy 382 NLSQVYVNRMSKNDQGTTCKRM - NLQDNNNGNDIGFGHOFNNIA-----KLVASN 431
 Db 411 WYLREVKRPYNNLKGNCWQFLPKDEGTE 440
 Qy 432 WYNRQIERS - SRTLGCSWEFLPVDDGWE 459

RESULT 8
 US-08-480-604A-2B
 Sequence 28, Application US/08480604A
 GENERAL INFORMATION:
 APPLICANT: KINK, JOHN A.
 APPLICANT: THALLEY, BRUCE S.
 APPLICANT: PADHYE, NISHA V.
 APPLICANT: FIRCA, JOSEPH R.
 APPLICANT: STAFFORD, DOUGLAS C.
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
 PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/480,604A
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/422,711
 FILING DATE: 14-APR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1996 amino acids
 TYPE: amino acid

; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 US-08-480-604A-2B
 Query Match Score 35.4%; Pred. No. 1.9e-56;
 Best Local Similarity 40.0%; Mismatches 150; Indels 37; Gaps 10;
 Matches 180; Conservative 83;
 Qy 4 KVNSELINNINLRLYKDNNLIDSGYAKVEYTDGVNL - DNQFKLTSSANSKIRY 61
 Db 866 EYTKNINTSULNLRLYKDNNLIDSGYAKVEYTDGVNL : : : : : : : : : : : :
 Qy 62 QNQNTINSVLFDSYSFWIRPKYKNDGTONYIHNETYINCMKNNSGWKISIRGNRLI 121
 Db 928 LKNATIVNSMYNFSFWIRPKYFN -- SISINNEYTINCMENNSCWKVSLNYGEILI 984
 Db 122 WTLDINGKTKEVFENTRDISEYINTRWFVTINN-LNNAKTYINGKLESNTDIRDI 180
 Qy 123 WTLDQTEBIQQRVFKYSQMNLISYINRWFEVTINNRLNNSKYINGSRLLDQPKISNL 1044
 Db 181 REYTANGELIIFKLGDIDRTQFTWMKMFYSFISNTEERTQSYSEYLKDFFWGNP 240
 Db 1045 GNHASNNTMFLKDGRDTHRTIWKVFNLDFKELNEKEIQLDYNQNSGILKDFWGDY 1104
 Qy 241 LMNKEYMMFNAGKNNSYIKLK-K-----DSPGEIELTRSKYQNNSKYINYTFDLYIG 291
 Db 1105 LQTKPVMNLIDPNKYYDVANGVTRGYMLKGPGSVMTNLNS-----LYRG 1157
 Qy 292 EKFIRKSNQSINDIVRKEDYYLDFFNLNCENRYTYKFKEEKFLAPISDSD 351
 Db 1158 TKEFIKKYASGN - KDNIVRNDRVYNNVVKRETLATASQAVEKILSAEPIPVG 1215
 Qy 352 ELYNTIQUIKEYDQP-TYSQCLLKKDEESTEIGLIGHRPFESGIVFEEYKDYFCISK 410
 Db 1216 NLSQVYVNRMSKNDQGTTCKRM - NLQDNNNGNDIGFGHOFNNIA-----KLVASN 1265
 Qy 411 WYLREVKRPYNNLKGNCWQFLPKDEGTE 440
 Db 1266 WYNRQIERS - SRTLGCSWEFLPVDDGWE 1293

RESULT 9
 US-08-405-496A-2B
 Sequence 28, Application US/08405496A
 Patent No. 5919665
 GENERAL INFORMATION:
 APPLICANT: WILLIAMS, JAMES A.
 TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
 NUMBER OF SEQUENCES: 30
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/405,496
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/422,711
 FILING DATE: 14-APR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496A
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04 DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40 027
 REFERENCE/DOCKET NUMBER: OPED-01308
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-0338
 INFORMATION FOR SEQ ID NO: 28:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1296 amino acids
 TYPE: amino acid
 TOPOLOGY: Linear
 MOLECULE TYPE: protein
 US-08-405-496A-28

Query Match 35.4%; Score 831.5; DB 2; Length 1296;
 Best Local Similarity 40.0%; Pred. No. 1.9e-56; Indels 37; Gaps 10;

Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

Qy 4 KYNSEITLNNTILNRYKDNNLIDLSGYAKVEVDYGVENL -DKNQFKLTSSANSKIRVT 61
 Db 868 EYKININTSILNLRYESHLDLSRASKINIGSVNFDPIDKNIQDENLESSKIEVI 927

Qy 62 QNQNIFNSVDFSVSENTRPKYKNDGIONYIHEVTLINCMKNNSGWKISRGNRII 121
 Db 928 LKNAIVNSMYENSTSFWRKPFN --SISLNEVTTINCMNNSGRVSNYGEII 984

Qy 122 WTLQDINGTKTSVPEFYNREDISEYINRWFVTTINM -INNAKEYTNGKLESHTDIKI 180
 Db 985 WTLQDQEIKQRVVFYKSMINISDYINRWFVTTINRLNSKTYINERLIDQPKISNL 1044

Qy 161 REVANGETIFKLDIDRTOFIWMMYSIFINTELSOSNTEERYKIOSSEYLKDGFNP 240
 Db 1045 GNIHSNNMTEKFQDGCRDHRYIWIKYFNLPDEKEIKDLDNQSNSGILDKDFNDY 1104

Qy 241 LMYNKEYMFENAGNKNYSVTKLK -- DSpVGEITRSKYKQNSKYIYRDLTG 291
 Db 1105 LQYDPYVMNLYDPNKVTDVNNGTRGMYLKGPGPSYMTNTLYNSS --- LYRG 1157

Qy 292 EKFIRRKSNSQSINDIVRKEDYIYDFFNLQNQEVRYVYKPKKEEPLFLAPISDSD 351
 Db 1158 TKEFIKKYASGN - KDNIVRNDRVYINVVKNKEYTRLATNASQAVERTSALEIPVG 1215

Qy 352 ELYNTIQKEYDEOP -TYSQCOLLFKDEESTDEIGJIGIURFYYSGTIVEYDYFCISK 410
 Db 1216 NLSQVYVMSKNDGGITNCKRM - NLQDNNENDIGTIGHQFNNTA ----- KLVASN 1265

Qy 411 WYKLEVKRKPYNUKLGCWQFPKDEQWV 440
 Db 1266 WYNROIERS --SRTLGCSWEFIPVDDGWE 1293

RESULT 10
 US-08-915-136-28
 Sequence 28, Application US/08915136
 General Information:
 Patent No. 6,490,960
 Applicant: KINK, JOHN A.
 Applicant: THALLEY, BRUCE S.
 Applicant: PADHYE, NISHA V.
 Applicant: FIRCA, JOSEPH R.
 Applicant: STAFFORD, DOUGLAS C.
 Title of Invention: VACCINE AND ANTITOXIN FOR TREATMENT AND
 Prevention of C. difficile Disease
 Number of Sequences: 32
 Correspondence Address:
 Addressee: MEDLEN & CARROLL, LLP
 Street: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/915,136
 FILING DATE:
 CLASSIFICATION:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: 08/480,604
 FILING DATE:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16 MAR-1995
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REREFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 28:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1296 amino acids
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-915-136-28

Query Match 35.4%; Score 831.5; DB 4; Length 1296;
 Best Local Similarity 40.0%; Pred. No. 1.9e-56; Indels 37; Gaps 10;

Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

Qy 4 KYNSEITLNNTILNRYKDNNLIDLSGYAKVEVDYGVENL -DKNQFKLTSSANSKIRVT 61
 Db 868 EYKININTSILNRYESHLDLSRASKINIGSVNFDPIDKNIQDENLESSKIEVI 927

Qy 62 QNQNIFNSVDFSVSENTRPKYKNDGIONYIHEVTLINCMKNNSGWKISRGNRII 121
 Db 928 LKNAIVNSMYENSTSFWRKPFN --SISLNEVTTINCMNNSGRVSNYGEII 984

Qy 122 WTLQDINGTKTSVPEFYNREDISEYINRWFVTTINM -INNAKEYTNGKLESHTDIKI 180
 Db 985 WTLQDQEIKQRVVFYKSMINISDYINRWFVTTINRLNSKTYINERLIDQPKISNL 1044

Qy 161 REVANGETIFKLDIDRTOFIWMMYSIFINTELSOSNTEERYKIOSSEYLKDGFNP 240
 Db 1045 GNIHSNNMTEKFQDGCRDHRYIWIKYFNLPDEKEIKDLDNQSNSGILDKDFNDY 1104

Qy 241 LMYNKEYMFENAGNKNYSVTKLK -- DSpVGEITRSKYKQNSKYIYRDLTG 291
 Db 1105 LQYDPYVMNLYDPNKVTDVNNGTRGMYLKGPGPSYMTNTLYNSS --- LYRG 1157

Qy 292 EKFIRRKSNSQSINDIVRKEDYIYDFFNLQNQEVRYVYKPKKEEPLFLAPISDSD 351
 Db 1158 TKEFIKKYASGN - KDNIVRNDRVYINVVKNKEYTRLATNASQAVERTSALEIPVG 1215

Qy 352 ELYNTIQKEYDEOP -TYSQCOLLFKDEESTDEIGJIGIURFYYSGTIVEYDYFCISK 410
 Db 1216 NLSQVYVMSKNDGGITNCKRM - NLQDNNENDIGTIGHQFNNTA ----- KLVASN 1265

Qy 411 WYKLEVKRKPYNUKLGCWQFPKDEQWV 440
 Db 1266 WYNROIERS --SRTLGCSWEFIPVDDGWE 1293

RESULT 10
 Sequence 28, Application US/08915136
 General Information:
 Patent No. 6,490,960
 Applicant: KINK, JOHN A.
 Applicant: THALLEY, BRUCE S.
 Applicant: PADHYE, NISHA V.
 Applicant: FIRCA, JOSEPH R.
 Applicant: STAFFORD, DOUGLAS C.
 Title of Invention: VACCINE AND ANTITOXIN FOR TREATMENT AND
 Prevention of C. difficile Disease
 Number of Sequences: 32
 Correspondence Address:
 Addressee: MEDLEN & CARROLL, LLP
 Street: 220 MONTGOMERY STREET, SUITE 2200

Qy 352 ELYNTIQIKEYDEOP-TYSCOLLEKKDEESTDEIGLIGHRYESEGVFBEYKDYFCISK 410
Db 1216 NL-SQVYVMSKNDGQITKCKM-NLDNNNGDGFQHOFNNTA----- KLVASN 1265
Qy 411 WYLKEVKRKPYNKLKGCMWQFLPKDEGWT 440
Db 1266 WYNRQLERS--SRTLGCSKWEFTVDDGWE 1293

RESULT 11
US-07-618-312A-2
Sequence 2, Application US/07618312A
GENERAL INFORMATION:
APPLICANT: Makoff Dr, Andrew J
APPLICANT: Romanos Dr, Michael A
APPLICANT: Clare Dr, Jeffrey J
APPLICANT: Fairweather Dr, Neil F
TITLE OF INVENTION: VACCINES
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: 14TH FLOOR
STREET: 2200 Clarendon Boulevard,
CITY: Arlington,
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22201

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/618,312A
FILING DATE: 19910516
CLASSIFICATION: 444
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 8926832.0
FILING DATE: 28-NOV-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9006097.1
FILING DATE: 17-MAR-1990
ATTORNEY/AGENT INFORMATION:
NAME: CRAWFORD MR, Arthur R
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 510-51
TELECOMMUNICATION INFORMATION:
TELEPHONE: 0101 703 870400
TELEFAX: 0101 703 5253468
TELEX: 200797 NIXN UR
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 452 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-618-312A-2

Query Match 25.3% Score 595; DB 1; Length 452;
Best Local Similarity 32.2%; Pred. No. 1.2e-38;
Matches 142; Conservative 88; Mismatches 183; Indels 28; Gaps 12;

Qy 14 IINRYKONNLIDLSGAGAKVEYDGVEL---NDKNOFLTSSANSKIRVTQNQNLIFN 69
Db 23 TLLNDIINDINDISGNSVSVTTPAOLVPGINK-----SGWKISIRGNRINTL 81
Db 23 TLLNDIINDINDISGNSVSVTTPAOLVPGINK-----SGWKISIRGNRINTL 124
Qy 70 SVFELDSVSEWRIPKKNDGTQNYIHNFTYIINCMMNN----SGWKISIRGNRINTL 124
Db 82 DMFNNETISFWLVPKYSASHLFOQNEYSTISSKKHSLSIGGSVSLKGNNLINTL 141
Qy 125 TDTNGTKSVFFYVIREDISEXYI-NEWFFYTINN-LNAAKIYINGKLESNTDKDIRE 182

Db 142 KDSAGEVRQITPER-DLEDKENAYLANKWVFITINDRSSANLYINGVLMGSAEITGLGA 200
Qy 183 VIANGEIIFKLGDGIDRTOFIWMKFESINFTELQSNTIEFRYKIQSYSEYLKDGEWNPLM 242
Db 201 IREDNNNTLKLDRCHNNNNQSYSIDERIFCFALNPRELEYTSLSITFLRDGFNPLR 260
Qy 243 YNKEYYMFENAGNKNSYIKLKDKDPSGEILTRSKYHNSKYINYRDLYIGEKFLTRKSNS 302
Db 261 YDTEYYLIPVASSKSDQVLKNNTDMYLNTNAPSYNGKUNIYRLYNGLFKTRKTPN 320
Db 303 QSINNDIIRKEDTLLDFFNNQEWRYTY---KYPKKEEEKLAPISDSDLYNTIQ 358
Qy 321 NEI-DSFVKGDFIKL-YVSXNNENTIVGPDKGAFNNDRILVGYNAPGIFTYKRN 378
Qy 359 IKEWDQPTTSCOLLFKKDEESTDEIGLIGHRYESEGVFEEYKDYFCISKWYKVEYKR 418
Db 379 AVKRDITYSYQLKLYDDKNS-`LGLYSPH--NGOIGNDPNDILIASNWYFNHLD 433
Qy 419 KPYNLKLGCNQWPITPKDEGWT 439
Db 434 K---TIGCDWYFVPTDEGWT 450

RESULT 12
US-08-280-228-2
Sequence 2, Application US/08280228
Patient No. 5571694
GENERAL INFORMATION:
APPLICANT: Makoff Dr, Andrew J
APPLICANT: Romanos Dr, Michael A
APPLICANT: Clare Dr, Jeffrey J
APPLICANT: Fairweather Dr, Neil F
TITLE OF INVENTION: VACCINES
NUMBER OF SEQUENCE: 13
CORRESPONDENCE ADDRESS:
ADDRESS: NIXON & VANDERHYE P.C.
STREET: 1100 No. 5571694th Glebe Road
CITY: Arlington,
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22201-4714
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/280,228
FILING DATE: 25-JUL-1994
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/618,312
FILING DATE: 27-NOV-1990
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 8926832.0
FILING DATE: 28-NOV-1989
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 9006097.1
FILING DATE: 17-MAR-1990
ATTORNEY/AGENT INFORMATION:
NAME: Wilson, Mary J.
REGISTRATION NUMBER: 32,955
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 816-4000
TELEFAX: (703) 816-4100
TELEX: 200797 NIXN UR
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 452 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein

MOLECULE TYPE: protein

US-08-280-228-2

ATTORNEY/AGENT INFORMATION:

NAME: Crawford Mr. Arthur R
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 510-51

TELECOMMUNICATION INFORMATION:

TELEPHONE: 0101 703 8750400
TELEFAX: 0101 703 5253468

TELEX: 200797 NXNN UR

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 452 amino acids

TYPE: AMINO ACID

TOPOLOGY: linear

MOLECULE TYPE: protein

US-07-618-312A-4

Query Match 25.3%; Score 595; DB 1; Length 452;

Best Local Similarity 32.2%; Pred. No. 1.2e-38;

Matches 142; Conservative 88; Mismatches 183; Indels 28; Gaps 12;

QY 14 ILNRLRYKDNNFLDLSGGAKVVEVDGVEL---NDKQFKLTSANSKIRYTONQNLIFN 69

Db 23 ILNLDINDINDISFFNSVITPDAQVPGINGK-AIHLVNESSSEVYHAMDDEYN 81

QY 70 SYVFLDSVSEWIRPKYKNDGIONYKHNEYTIILNCMKN---SGNKISIRGNRITWL 124

Db 82 DMFNNTVSVFLRVPSASLHQEGTNTSYISIIMKKHSLSIGSWSLGNNLWL 141

QY 125 IDINGRKVSPEYINREDSEYI NRWFVITINN-LNAAKTYINGKLESNDIKIRE 182

Db 142 KDSAGEVRQLTR-DLPDKENAYLANKWVFTITNDLSSANLYINGTLMGSAEITLGIA 200

QY 183 VIANGETLFLKDDIDRTQFTWMKYSFISINTELQSNTLEERYKTSQSEYLDFWGPNPLM 242

Db 201 IREDNNTLKLDRCCNNQNYSIDERFRCKALPKELKELEYTSLSTFLRFWGPNPLR 260

QY 243 YKKEYYAFENAGNKNSTYKLKDSPVGEILLTRSKVNQNSKYINTFDLYTEGEFTTIRKGNS 302

Db 261 YDEEYLIPVASSSKDQVLKNITDYMWTMPSITNGKUNIVYRRLYNGLKTFIKRTPN 320

QY 303 OSINDLTVKEDTYLTDFFENNOEVRYT---KFKKEKEEKFLFLAPIDSDELYNTIQ 358

Db 321 NET-DSFVKGDFIKL-YVSNNNHEHVGYPKDGNANFLDRIRVGYNAPGFLYKME 378

QY 359 IKEDEQPTYSQOLFKKDEFESTDEGLIGLTHREYESGIVFEYKDYFCISKWYKEYKR 418

Db 379 AVKLDRKTYTSQQLKLYDDKVAS--IGLYTH--NGQIGNDPNDLILIASNNYFNHJKD 433

QY 419 KPYNLKLGCNWWOFIPKDEGWT 439

Db 434 K---ILGCDWYFVFDEGWT 450

RESULT 13 US-07-618-312A-4

Sequence 4, Application US/07618312A

GENERAL INFORMATION:

Patent No. 5389540

APPLICANT: Makoff Dr. Andrew J

APPLICANT: Romanos Dr. Michael A

APPLICANT: Clare Dr. Jeffrey J

APPLICANT: Fairweather Dr. Neil F

NUMBER OF SEQUENCES: 13

CORRESPONDENCE ADDRESS:

ADDRESSEE: 14th Floor

STREET: 2200 Clarendon Boulevard,

CITY: Arlington,

COUNTRY: U.S.A.

ZIP: 22201

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Po-DO-SMS-DOS

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/618,312A

FILING DATE: 19910516

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 8926832.0

FILING DATE: 28-NOV-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 9006097.1

FILING DATE: 17-MAR-1990

Query Match 25.3%; Score 594; DB 1; Length 452;

Best Local Similarity 32.0%; Pred. No. 1.5e-38;

Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;

Qy 14 ILNRLRYKDNNFLDLSGGAKVVEVDGVEL---NDKQFKLTSANSKIRYTONQNLIFN 69

Db 23 ILNLDINDLISDFGNSSVITYPDAQVPGINGK-AIHLVNESSSEVYHAMDDEYN 81

Qy 70 SVFLDFSVSTWIRPKYKNDGIONYKHNEYTIICMKMN---SGWKISIRGNRITWL 124

Db 82 DMFNNTVSVFLRVPKVASHLQEQGTNEYSIISIIMKKHSLSIGSGNSVLSKGNNLWL 141

Qy 125 IDINGRKVSPEYINREDSEYI NRWFVITINN-UNAKAYTNGKLESNDIKIRE 182

Db 142 KDSAGEVRQLTR-DLPDKENAYLANKWVFTITNDLSSANLYINGTLMGSAEITLGIA 200

Qy 183 VIANGETLFLKDDIDRTQFTWMKYSFISINTELQSNTLEERYKTSQSEYLDFWGPNPLM 242

Db 201 IREDNNTLKLDRCCNNQNYSIDERFRCKALPKELKELEYTSLSTFLRFWGPNPLR 260

Qy 243 YKKEYYAFENAGNKNSTYKLKDSPVGEILLTRSKVNQNSKYINTFDLYTEGEFTTIRKGNS 302

Db 261 YDEEYLIPVASSSKDQVLKNITDYMWTMPSITNGKUNIVYRRLYNGLKTFIKRTPN 320

Qy 303 OSINDLTVKEDTYLTDFFENNOEVRYT---KFKKEKEEKFLFLAPIDSDELYNTIQ 358

Db 321 NET-DSFVKGDFIKL-YVSNNNHEHVGYPKDGNANFLDRIRVGYNAPGFLYKME 378

Qy 359 IKEDEQPTYSQOLFKKDEFESTDEGLIGLTHREYESGIVFEYKDYFCISKWYKEYKR 418

Db 379 AVKLDRKTYTSQQLKLYDDKVAS--IGLYTH--NGQIGNDPNDLILASNNYFNHJKD 433

Qy 419 KPYNLKLGCNWWOFIPKDEGWT 439

Db 434 K---ILGCDWYFVFDEGWT 450

RESULT 14 US-08-280-228-4

Sequence 4, Application US/08280228

Patent No. 5571694

GENERAL INFORMATION:

APPLICANT: Makoff Dr. Andrew J

APPLICANT: Romanos Dr. Michael A

APPLICANT: Clare Dr. Jeffrey J

APPLICANT: Fairweather Dr. Neil F

TITLE OF INVENTION: VACCINES

NUMBER OF SEQUENCES: 13

CORRESPONDENCE ADDRESS:

ADDRESSEE: NIXON & VANDRHYE P.C.

STREET: 1100 No. 5571694th Glebe Road

CITY: Arlington,

STATE: Virginia

COUNTRY: U.S.A.

ZIP: 22201-4714

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/280,228
 FILING DATE: 25-JUL-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/618,312
 FILING DATE: 28-NOV-1990
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: GB 9006097.1
 FILING DATE: 17-MAR-1990
 ATTORNEY/AGENT INFORMATION:
 NAME: Wilson, Mary J.
 REGISTRATION NUMBER: 3,2,955
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 816-4100
 TELEX: 200797 NIXN UR
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 452 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-280-228-4

Query Match Score 25.3%; Score 594; DB 1; Length 452;
 Best Local Similarity 32.0%; Pred. No. 1.5e-38; Gaps 12;
 Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;

QY 14 ILNLRKDKNNLIDLSGYAKVEVDGVEL---NDKNOKFLSSANSKIRVTQNQNLLIFN 69
 Db 23 ILNLDINNDISDISFNNSVITYPAQLVPGINGK-AHLYVNNESEVIVKAMDDEYN 81
 QY 70 SYVLFDSVSFWTRIPKYKDQNGIYHNEYTTINCMKNN---SGRKISIRGNRITWL 124
 Db 82 DRENNFTVSFWLRPVSVASHLEQVGTNEVISIISMMKHSLSIGSGWSVSLGNNLWTL 141
 QY 125 IDINGTKTSVFEYNREDISEYI-NRWFEVTIRNN-LNAKTYINGKLESNTDIKIRE 182
 Db 142 KDSAGVRQITFR-DPDKENAYLANKWVITINDRSLANLYINGTLMGSBETTGGA 200
 QY 183 VANGELEIFKLGDIDRTQFLMKYSIFINTELSONNIEERYKIOSSEYLKDFWGPNLM 242
 Db 201 IREDNNITLKLDRCNNNQOVSIDKERICAKALKEIEKLYTYSLSITFLRDWGPNLR 260
 QY 243 YNKEYYFENAGNKNSTIKLKKDPSVGEILTRSKYQNNSKINYADLYIGEKFITRKSNS 302
 Db 261 YDTEYKLIPVASSSKYDQLKNITDYMNTNAPSTNGKLNIVYRLYNLKFETIKRTPN 320
 QY 303 QSINDDIVKEDYVYDQFLKYYDEFNQEWVWVY---KYPKEKEEKDPLAPISDSDELYNTIQ 358
 Db 321 NEI-DSFYKSGDFIKL YVSNNNNBETIVGPKDGNAFFNNDLIRVGNAAPGIPLYKME 378
 QY 359 IKYEDEQPTYSCOLFKKKDEESTDEIGLIGHRFYESGTVFEEYKDFCISKWYKLKEYKR 418
 Db 379 AVKLRLDKTYSQQLKDDKNS -LGLVGH---NGQ1GNDPNRDILIASNWYFNALKD 433
 QY 419 KPNLKIGCNWOFIPDEGWT 439
 Db 434 K----ILGCDWVFVPTDEGWT 450
 Db 487 NEI-DSFYKSGDFIKL-YSYNNNEHIVGPKDGNAFFNNDLIRVGNAAPGIPLYKME 544
 QY 500 RESULT 15
 ; US-08-668-381A-5
 ; Sequence 5, Application US/08668381A

Patent No. 5780024
 GENERAL INFORMATION:
 APPLICANT: Brown, Robert H.
 APPLICANT: Fishman, Paul S.
 APPLICANT: Francis, Jonathan W.
 APPLICANT: Hosler, Betsy A.
 TITLE OF INVENTION: SUPEROXIDE DISMUTASE/TETANUS TOXIN
 TITLE OF INVENTION: FRAGMENT C HYBRID PROTEIN
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson P.C.
 STREET: 225 Franklin Street
 CITY: Boston
 STATE: MA
 COUNTRY: USA
 ZIP: 02110-2804
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/668,381A
 APPLICATION NUMBER: US/08/668,381A
 FILING DATE: 21-JUN-1996
 CLASSIFICATION: 514
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 60/000,473
 APPLICATION NUMBER: 60/000,473
 FILING DATE: 23-JUN-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: Clark, Paul T.
 REGISTRATION NUMBER: 30,164
 REFERENCE/DOCKET NUMBER: 00786/269001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 617/542-5070
 TELEFAX: 617/542-8906
 TELEX: 200154
 INFORMATION FOR SEQ ID NO: 5:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 618 amino acids
 TYPE: amino acid acids
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-668-381A-5

Query Match Score 25.3%; Score 594; DB 1; Length 618;
 Best Local Similarity 32.0%; Pred. No. 2.4e-38; Gaps 12;
 Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;

QY 14 ILNLRKDKNNLIDLSGYAKVEVDGVEL---NDKNOKFLSSANSKIRVTQNQNLLIFN 69
 Db 189 ILNLDINNDISDISFNNSVITYPAQLVPGINGK-AHLYVNNESEVIVKAMDDEYN 247
 QY 70 SVFLDFSVFWTRIPKYKDQNGIYHNEYTTINCMKNN---SGRKISIRGNRITWL 124
 Db 248 DMFNNFTVSFWLRPVSVASHLEQVGTNEVISIISMMKHSLSIGSGWSVSLGNNLWTL 307
 QY 125 IDINGTKTSVFEYNREDISEYI-NRWFEVTIRNN-LNAKTYINGKLESNTDIKIRE 182
 Db 308 KDSAGVRQITFR-DPDKENAYLANKWVITINDRSLANLYINGTLMGSBETTGGA 366
 QY 183 VIANGETIIFLGDIDRTQFLTMKYSIFINTELSONNIEERYKIOSSEYLKDFWGPNLM 242
 Db 367 IREDNNITLKLDRCNNNQOVSIDKERICAKALKEIEKLYTYSLSITFLRDWGPNLR 426
 QY 243 YNKEYYFENAGNKNSTIKLKKDPSVGEILTRSKYQNNSKINYADLYIGEKFITRKSNS 302
 Db 427 YDTEYKLIPVASSSKYDQLKNITDYMNTNAPSTNGKLNIVYRLYNLKFETIKRTPN 486
 QY 303 QSINDDIVKEDYVYDQFLKYYDEFNQEWVWVY---KYPKEKEEKDPLAPISDSDELYNTIQ 358
 Db 487 NEI-DSFYKSGDFIKL-YSYNNNEHIVGPKDGNAFFNNDLIRVGNAAPGIPLYKME 544
 QY 359 IKYEDEQPTYSCOLFKKKDEESTDEIGLIGHRFYESGTVFEEYKDFCISKWYKLKEYKR 418
 ; US-08-668-381A-5
 ; Sequence 5, Application US/08668381A

Db 545 AVKLRDLKTVSYQLKLYDDKNAS--LGLVGTH---NGQIGNDPNRDLLIASNWYFNHLKD 599
QY 419 KPYNIKLGCNWNQFTPKDEGWT 439
Db 600 K----ILGCDWYFVPTDEGWT 616

Search completed: November 1, 2002, 08:17:44
Job time : 30 secs

GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.

OM protein search, using sw model

Run on: November 1, 2002, 08:17:28 ; Search time 31 Seconds

(without alignments)
196.854 Million cell updates/sec

Title: US-09-910-186A-8

Perfect score: 2350

Sequence: 1 MANKYNEILNNIILNRLYK.....YNLKGNCNWQFIPKDEGNTTE 440

Scoring table: BLOSUM62

GapOp 10.0 , Gapext 0.5

Searched: 90412 seqs, 13869272 residues

Total number of hits satisfying chosen parameters: 90412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Published_Applications_AA:*

```

1: /cgn2_6/podata/2/pubpaas/US08_NEW_PUB.pep:*
2: /cgn2_6/podata/2/pubpaas/PCT_NEW_PUB.pep:*
3: /cgn2_6/podata/2/pubpaas/US06_NEW_PUB.pep:*
4: /cgn2_6/podata/2/pubpaas/US05_PUBCOMB.pep:*
5: /cgn2_6/podata/2/pubpaas/US07_NEW_PUB.pep:*
6: /cgn2_6/podata/2/pubpaas/US02_PUBCOMB.pep:*
7: /cgn2_6/podata/2/pubpaas/PICTUS_PUBCOMB.pep:*
8: /cgn2_6/podata/2/pubpaas/US09_PUB.pep:*
9: /cgn2_6/podata/2/pubpaas/US09_NEW_PUB.pep:*
10: /cgn2_6/podata/2/pubpaas/US09_PUBCOMB.pep:*
11: /cgn2_6/podata/2/pubpaas/US10_NEW_PUB.pep:*
12: /cgn2_6/podata/2/pubpaas/US10_PUBCOMB.pep:*
13: /cgn2_6/podata/2/pubpaas/US50_NEW_PUB.pep:*
14: /cgn2_6/podata/2/pubpaas/US50_PUBCOMB.pep:*
```

ALIGNMENTS

```

RESULT 1
US-09-726-949A-1
; Sequence 1, Application US/09726949A
; Patent No. US20020137986A1
; GENERAL INFORMATION:
; APPLICANT: Allergan, Inc.
; APPLICANT: Lin, Wei-Jen
; APPLICANT: Aoki, Kei Roger
; APPLICANT: Steward, Lance E.
; TITLE OF INVENTION: NEUROGIXINS WITH ENHANCED TARGET
; TITLE OF INVENTION: SPECIFICITY
; FILE REFERENCE: 36121-20002.00
; CURRENT APPLICATION NUMBER: US/09/726,949A
; CURRENT FILING DATE: 2000-11-19
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: FastSEQ for Windows Version 4.0
; LENGTH: 1295
; ORGANISM: Clostridium botulinum
; TYPE: PRT
; SEQ ID NO 1
; US-09-726-949A-1
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	831.5	35.4	1295	Sequence 1, Appli
2	826.5	35.2	425	Sequence 9, Appli
3	732	31.1	431	Sequence 1, Appli
4	318	13.5	144	Sequence 2, Appli
5	284.5	12.1	144	Sequence 3, Appli
6	149.5	6.4	1086	Sequence 15, Appli
7	149	6.3	143	Sequence 4, Appli
8	144	6.1	936	Sequence 5251, AP
9	144	6.1	1009	Sequence 12141, A
10	137.5	5.9	476	Sequence 3, Appli
11	121	5.1	603	Sequence 13683, A
12	121	5.1	1421	Sequence 13, Appli
13	112.5	4.8	4406	Sequence 8, Appli
14	110.5	4.7	1093	Sequence 392, App
15	110	4.7	751	Sequence 280, App
16	110	4.7	841	Sequence 5779, AP
17	110	4.7	841	Sequence 12751, A
18	110	4.7	866	Sequence 11373, A
19	109.5	4.7	829	Sequence 324, App

Y	241	IMNKYYMFAGNKNYSYIKLKK-----DSPGEILTRSKINQNSKYINYRULYIG	291
Db	1104	LQDKEYKYMNLQYDPRVYDQVNVGIRGYMLKGPGSYMTNTYLNSS-----LYRG	1156
Y	292	EKFIIRKNSQSINDDIVRKEDYIYLDFFLNLQEPRVITYKYFKEKEEKLFLAPISDSD	351
Db	1157	TKFLIRKKYASEN-----KNTIVRNDRVYIINVVKNKEYRLATNASOAVEKVIISALELPDVG	1214
Y	352	BLYNTIQKEYDEQP-TYSCQLLFKDEESTDEIGLIGHFYESGIVFEEYKDYFCISK	410
Db	1215	NLSQQVVMKSNKNDQG1TINKCRM-----NLQDNNSNDIGTGFHQFNNTA-----KLVASN	1264
Y	411	WYLKEYTKRPYPNKLGGCNWQFIPKD8SWTE	440
Db	1265	WYNRQIERS-SRTLGCSWEFTPVDDGNGE	1292
RESULT 2			
	US-09-288-326-9	Sequence 9, Application US/09288326	
		Patent No. US2010018043A1	
		GENERAL INFORMATION:	
		APPLICANT: Kei Roger Aoki	
		APPLICANT: George Sachs	
		TITLE OF INVENTION: Method and Compositions for the Treatment of Pancreatitis	
		TITLE OF INVENTION: Treatment of Pancreatitis	
		FILE REFERENCE: 17882	
		CURRENT APPLICATION NUMBER: US/09/288, 326	
		CURRENT FILING DATE: 1999-04-08	
		NUMBER OF SEQ ID NOs: 11	
		SOFTWARE: FastSEQ for Windows Version 3.0	
		SEQ ID NO 9	
		LENGTH: 425	
		TYPE: PRT	
		ORGANISM: Clostridium botulinum	
	US-09-288-326-9		
Query	9	IANNIILILRYKDNNLIDLSGYAKVEYDGYEIN--DKNOFKLUTSSANSKIRTYQNQNI	66
Db	2	IINTSILNRYEENHLIDLSRYASKINGSKYKFDIDKNOIQLFNLNLSKIEVLXNAI	61
Query	67	IFNSVLFDSVSSWIRPKYKNDGQIQTQHNEYTIINOMKNSGKVISIRGNRIIWTLID	126
Db	62	VYNSMENFSTSWIRPKYFN--SISLNNEETINCMENNSGKWLNSYLNQGJTWLTD	118
Query	127	INGTKTSVSEFYENRIDESEYIINRWFYTITNNLNAAKTYINGLSTDIDIREVIA	185
Db	119	TQEIKQRVYFVKYSOMINISDYNRWFYTITNNRNNSKIFYINGRLIDQKPTISNLGN-NHA	178
Query	186	NGEITFKLDGIDTQFIMWKYSFIENTBLSQSNTIEERYKIQSYSEYLKDFFWGRPLMYNKR	245
Db	179	SNNMKFLKGCRDTHYIWKYFNEDELNEKIDYLDQNNSGILKDFWGDQLQDK	238
Query	246	EYMMFAGNKNYSYIKLKK-----DSPGEILTRSKINQNSKYINYRULYIGEKFII	296
Db	239	PYMNLNLYPKNKTYDQVNVGIRGYMLKGPGSYMTNTYLNSS-----LIRTGTFII	291
Query	297	RRKNSQSINDDIVRKEDYIYLDFFLNLQEPRVITYKYFKEKEEKLFLAPISDSELYNT	356
Db	292	KKTAISGN-KDNTIVRNDRVYIINVVKNKEYRLATNASOAVEKVIISALELPDVGNSLSQV	349
Query	357	IQKEYDEQP-TYSCQLLFKKDEESTDEIGLIGHFYESGIVFEEYKDYFCISKWYLKE	415
Db	350	YMMVSKNQDGTITNCKM--NLQDNNSNDIGTGFHQFNNTA-----KLVASNWYNSQ	399
Query	416	VKRRKNSNLRKGNCNFQKDFWGDQLQDK	440
Db	400	TERS-SRTLGCSWEFTPVDDGNGE	422

RESULT 4

US-08-981-087A-2

Sequence 2, Application US/08981087A
Patent No. US20020081304A1

GENERAL INFORMATION:

APPLICANT: Elmore, Michael J.
Mauchline, Margaret L.

APPLICANT: Minton, Nigel P.

APPLICANT: Pasechnik, Vladimir A.

APPLICANT: Titball, Richard W.

TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: NIXON & VANDERHIE P.C.
STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor
CITY: Arlington
STATE: VA
COUNTRY: USA
ZIP: 22201-4741

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.1, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/981,087A
FILING DATE: 27-MAY-1998
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: PCT/GB96/01409
FILING DATE: 12-JUN-1996
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 9511909.5
FILING DATE: 12-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Crawford, Arthur R.
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 124-688

TELECOMMUNICATION INFORMATION:

FILING DATE: 1-JUN-1995
TELEPHONE: 703-816-4000
TELEFAX: 703-816-4100

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
LENGTH: 144 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-981-087A-3

RESULT 5

US-08-981-087A-3

Sequence 3, Application US/08981087A
Patent No. US20020081304A1

GENERAL INFORMATION:

APPLICANT: Elmore, Michael J.
Mauchline, Margaret L.

APPLICANT: Minton, Nigel P.

APPLICANT: Pasechnik, Vladimir A.

APPLICANT: Titball, Richard W.

TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: NIXON & VANDERHIE P.C.
STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor
CITY: Arlington
STATE: VA
COUNTRY: USA
ZIP: 22201-4741

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/981,087A
FILING DATE: 27-MAY-1998
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: PCT/GB96/01409
FILING DATE: 12-JUN-1996
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 9511909.5
FILING DATE: 12-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Crawford, Arthur R.
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 124-688

TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-816-4000
TELEFAX: 703-816-4100

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
LENGTH: 144 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-981-087A-3

Query Match 136 FEYNRREDISEYINWFVFTNN-LNNAKIVNGKLESNTDIKDIREVIANGEIIFKLD 194
Best Local Similarity 39.3%; Pred. No. 6e-16;
Matches 59; Conservative 27; Mismatches 45; Indels 19; Gaps 4;

Db 2 FNYTQMSDITKWKWTFITNNLGSRSITVGNIDKEKSNLGDSNLFKIV 61

Query Match 137 KNYNSETLNNTILNLYKDNNLIDSIGYAKVEYDGVEL-NDKNQPLTSSANSIRY 60
Best Local Similarity 45.2%; Pred. No. 1.4e-18;
Matches 61; Conservative 33; Mismatches 35; Indels 6; Gaps 3;

Db 195 GDIDTQFLMKYFSITSEERYKQSYSEYLKDWFNGPLMYNKEYMPNAGN 254
Query Match 138 KNYNSVILKDKDPSVGEITRSKYNONSKY 72
Best Local Similarity 45.2%; Pred. No. 1.4e-18;
Matches 61; Conservative 33; Mismatches 35; Indels 6; Gaps 3;

Db 62 GCND-TRYVGRYKVDFELGKTEIYSDPDSLKDWFNGPLLYNKRYLLNL-- 118

Query Match 139 KNYVIKLKKDPSVGEITRSKYNONSKY 284
Best Local Similarity 45.2%; Pred. No. 1.4e-18;
Matches 61; Conservative 33; Mismatches 35; Indels 6; Gaps 3;

Db 139 NKLYKIKDNDSTMDYENNEKKFID-SGYGSNISINGDVIIYSNRRQ:GIVSSKPVNI 72

PRIOR APPLICATION NUMBER: 60/191,078
 PRIOR FILING DATE: 2000-03-21
 PRIOR APPLICATION NUMBER: 60/206,848
 PRIOR FILING DATE: 2000-05-23
 PRIOR APPLICATION NUMBER: 60/207,727
 PRIOR FILING DATE: 2000-05-26
 PRIOR APPLICATION NUMBER: 60/242,578
 PRIOR FILING DATE: 2000-10-23
 PRIOR APPLICATION NUMBER: 60/253,625
 PRIOR FILING DATE: 2000-11-27
 PRIOR APPLICATION NUMBER: 60/257,931
 PRIOR FILING DATE: 2000-12-22
 PRIOR APPLICATION NUMBER: 60/269,308
 PRIOR FILING DATE: 2001-02-16
 SEQ ID NO: 14.10
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO: 5251
 LENGTH: 996
 TYPE: PRT
 ORGANISM: *Staphylococcus aureus*
 US-09-815-242-5251

Query Match Score 144; DB 10; Length 996;
 Best Local Similarity 21.0%; Pred. No. 0; 0.00071;
 Matches 106; Conservative 82; Mismatches 155; Indels 162; Gaps 28;
 SEQ ID NO: 12141

Query Match Score 144; DB 10; Length 1009;
 Best Local Similarity 21.0%; Pred. No. 0; 0.00071;
 Matches 106; Conservative 82; Mismatches 155; Indels 162; Gaps 28;

QY 3 NKNSEIINNITILNRYKD-----NNLIDLGSYGAKVEYVGVELNDKNOFKLTSAN 55
 DB 386 NRYQQSYLN--IERURTEDQLDGLNLNIK----GLEKVERSIGGNESDEKIELEN 438

QY 56 SKIRYTONQNTIENSVFLDSFWIRIPIKYND-----GIONYIHNEYTIINCMK 106
 DB 439 AITINNEINIVKTN-----EKADELKLGSKOELEQINEEKTI--LK 482

QY 107 NNSGWKISIRONRNTIWLDINGTKTSVFEY-----MIREDISEYINRWT 152
 DB 483 N-----LEIKLDRYDKSKLNDK-ESFISEIKSIAVIGDOCPICBGEIQDIGHHD--- 533

QY 153 FVTITNLLNAK-TYIN-GKLES----NTDIDIREVANGELIFLKDLDRTQFIW 205
 DB 534 EDSATKRQNKEELKEIANHTMESVATHEKFVNKEISN--INITKQDSL----- 584

QY 206 KYSFNTTEL-SQSITIEEYKIOSYSEYLKDFTWGNPM-YNKEYWMENAKKN-SYIK 260
 DB 585 -LEVINKRLENENALNNORDLNKFIEQMKEEKDNLIQIHNKQLRL---NKNBSELK 638

QY 261 LKKDSPGEILTRSKYK-----QNSKYINYRDLYIGERFIIIR-- 298
 DB 639 ICRNL-TEFETLSKNNNTNFEDVKKYIQDVNQHQSNOQEDKLQLSORKLQNN 697

QY 299 ---KSNQSINDDTYRKEDYIYDFUNQ-----EWR-----VYTYK 333
 DB 698 LNHYENQJETNNDLINEQSIEMENSLNLTDDNELLANGQEQQBLEQKRTYKRR 757

QY 334 YFKKEEKFLAPIS-----DSDELYNTIQIKE-----YDEOPT-YSCQOLFYKDEE 379
 DB 758 YREFEMPIARLESLTKDKEQDLSKDKDYELKGKMTLIDEYSAVHYQCQNNIKTQS 817

QY 380 SDEIGLIGIHRFYESEGIVFREYKD 404
 DB 818 IVSHINYLN-----QELKD 831

RESULT 9
 US-09-815-242-12141
 Seq 12141, Application US/0915242
 Patent No. US20020061569A1
 GENERAL INFORMATION:
 APPLICANT: Haselbeck, Robert
 APPLICANT: Ohlsen, Kari L.
 APPLICANT: Ziskind, Judith W.
 APPLICANT: Wall, Daniel
 APPLICANT: Trawick, John D.

RESULT 10
 US-09-815-242-12141
 Seq 12141, Application US/0915242
 Patent No. US20020061569A1
 GENERAL INFORMATION:
 APPLICANT: Haselbeck, Robert
 APPLICANT: Ohlsen, Kari L.
 APPLICANT: Ziskind, Judith W.
 APPLICANT: Wall, Daniel
 APPLICANT: Trawick, John D.

US-09-774-414-3

Sequence 3, Application US/09774414
 Patent No. US2002010231A1
 APPLICANT: The Institute of Physical and Chemical Research
 TITLE OF INVENTION: Endonuclease
 FILE REFERENCE: PH-651
 CURRENT APPLICATION NUMBER: US/09/774,414
 CURRENT FILING DATE: 2001-01-31
 PRIOR APPLICATION NUMBER: 09/306,970
 PRIOR FILING DATE: 1999-05-07
 NUMBER OF SEQ ID NOS: 38
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO: 3
 LENGTH: 476
 TYPE: PRT
 ORGANISM: *Saccharomyces cerevisiae*
 US-09-774-414-3

Query Match 5.9%; Score 137.5; DB 10; Length 476;
 Best Local Similarity 18.4%; Pred. No. 0.00095; Gaps 23;
 Matches 88; Conservative 75; Mismatches 123; Indels 193; Gaps 23;

Qy 4 KYNELLNNTYKDNLDSLGYAKVEYDGVELDENQNKTSNSK-RTVTQN 63
 Db 124 KYN-EILKNNMNLNYKTSN------JETLNNSNNFYL----- 153
 Db 154 -----MDKYLNNKYYKDNLMNPNYYMNINNNGK 186
 Db 154 RIIWTLIDINGTKSVFFENYIREDISYEINRMEE----VITTNLNA-N-KIYNGKL 171
 Qy 64 QNTIPNSVLFDSVSFWIRIPKYKNDGIONYIHNEY---TIIINCMNNNSGW-KISIRGN 118
 Db 187 LNIRYFLDLN---NNEFYD----LGGLIEGDDYIGGGGITNNHANDVNTIFINKRI 238
 Qy 172 ESNTDKDIREVANGELLEFKLDGIDRQETIMKYESLIENTELQSNEIEFYKIOSYE 231
 Db 239 KNSLVEKWDTLK----DNEYFV----NAFSNIKTMFLAKERIFTNLYNK 281
 Qy 232 YLKDFWGNPLMYKYMENAGNKNSYKLKDSPVGIL-----TR 273
 Db 282 LYSDFKINQNNHIIY----NYLKINNKLPIKNTMDIKNNYLAGFTAADGSFLS 333
 Qy 274 SKYNONSKYI--NYRDLYTGEKFIRKSNSQINDIVKE-DIYLDFFNLN---- 324
 Db 334 SMYNPDTLFLFKNMNPSSYV-----ISOVTRKELIYLQESFOLSNVKK 379
 Qy 325 -QBWRVTTYKVFKEEPEKLF-----LAPISDDEL----YNTIQIKYDEQFTYS 369
 Db 380 VGNRKLKDFKLFTRTDELMKFLYFDKLPHDQNQNYIKERFNT-IKSYNNW---- 434
 Qy 370 CQQLFRRKDEESTDEIGLIGHFRYFSEGVYFEYFV-----RDIYFCFSKWLKEVKRP 420
 Db 435 -----NRVF--GLVSEYINNIKIDNYDYYZZNKYINMHNAKRP 471

RESULT 11
 Sequence 13, Application US/09815242
 Patent No. US200201565A1
 GENERAL INFORMATION:
 APPLICANT: Hasselbeck, Robert
 APPLICANT: Ohlsen, Kari L.
 APPLICANT: Zyskind, Judith W.
 APPLICANT: Wall, Daniel
 APPLICANT: Trawick, John D.
 APPLICANT: Carr, Grant J.
 APPLICANT: Yamamoto, Robert T.
 APPLICANT: Xu, H. Howard
 TITLE OF INVENTION: Identification of Essential Genes in Prokaryotes
 TITLE OF INVENTION: Prokaryotes
 CURRENT APPLICATION NUMBER: US/09/815,242
 CURRENT FILING DATE: 2001-03-21

RESULT 12
 US-09-924-154-13
 Sequence 13, Application US/09924154
 Patent No. US200212741A1
 GENERAL INFORMATION:
 APPLICANT: Narum, David L.
 APPLICANT: Sim, Kim L.
 TITLE OF INVENTION: Anti-Plasmodium Compositions and Methods of Use
 FILE REFERENCE: 05213-0465 43170-562105
 CURRENT APPLICATION NUMBER: US/09/924,154
 CURRENT FILING DATE: 2001-08-07
 PRIOR APPLICATION NUMBER: US 60/223,525
 PRIOR FILING DATE: 2000-08-07
 NUMBER OF SEQ ID NOS: 17
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO: 13
 LENGTH: 1421
 TYPE: PRT

; ORGANISM: Mammalian
; US-09-924-154-13

Query Match 5.1%; Score 121; DB 10; Length 1421;
Best Local Similarity 19.4%; Pred. No. 0.069;
Matches 110; Conservative 82; Mismatches 159; Indels 216; Gaps 32;

QY 3 NKNSEILANNTINLRYKD----NNLDLSGGYAVV----EYDVG - ELNDK---- 45
DB 225 NKNSEIFCD - LKNSEIFDGLHAGMDFGYSTKAENKIQEYFKGAEGBISHKIKN 282

QY 46 ----NQF - KLTSSANSKIRVTQNONIIFNSVLFSESVFWI----R 82
DB 283 FRKKWNEPREKLMEAMSEHK - NNINNCNKNIPOELQITQWIKEWGEFLLERDRSK 340

QY 83 TP - KYKNIGTONYTHENEYTTINCMKNGKWSITSRGNRIIWLDINGTKSYFFEYNI 140
DB 341 LPKSCKKNNTLYEAECKE-CIDPOMKYRD-WTIR---SKFEWHTLSKEYETQKV---P 390

QY 141 REDISEYINRWEFFITTNLNNAKIIYINGKLESNTDK-----DIREVIANGEI 189
DB 391 KENAENYL----TKSENKNDKAVSL --LLNNCDAYSKYCDCRHTTUVSKVGN - 441

RESULT 14
US-09-801-368-392

Sequence 392, Application US/09801368
; Patent No. US2002128250A1
; GENERAL INFORMATION:
; APPLICANT: Busby, Robert
; APPLICANT: Calli, Brian
; APPLICANT: Hecht, Peter
; APPLICANT: Holtzman, Doug
; APPLICANT: Maiden, Kevin
; APPLICANT: Maxon, Mary
; APPLICANT: Milne, Todd
; APPLICANT: No. US2002128250A1man, Thea
; APPLICANT: Rover, John
; APPLICANT: Salam, Sofie
; APPLICANT: Sherman, Amir
; APPLICANT: Siliva, Jeff
; APPLICANT: Summers, Eric
; TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi
; CURRENT APPLICATION NUMBER: US/09/801,368
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: US 09/487,558
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: US 60/160,587
; PRIOR FILING DATE: 1999-10-20
; NUMBER OF SEQ ID NOS: 440
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO: 392
; LENGTH: 1093
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-09-801-368-392

RESULT 13
US-09-765-205-8
; Sequence 8, Application US/09765205
; PATENT NO. US2002034800A1
; GENERAL INFORMATION:
; APPLICANT: COO, Li
; TITLE OF INVENTION: BONE MARROW SECRETED PROTEINS AND POLYNUCLEOTIDES
; FILE REFERENCE: 1458_004/200130_449
; CURRENT APPLICATION NUMBER: US/09/765,205
; CURRENT FILING DATE: 2001-01-17
; PRIOR APPLICATION NUMBER: US/09/212,440
; PRIOR FILING DATE: 1998-12-16
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO: 8
; LENGTH: 406
; TYPE: PRT
; ORGANISM: human
; US-09-765-205-8

Query Match 4.8%; Score 112.5; DB 10; Length 406;
Best Local Similarity 21.7%; Pred. No. 0.074;
Matches 61; Conservative 43; Mismatches 86; Indels 91; Gaps 15;

QY 151 WFFVITNNLNNAKIIYINGKLESNTDKDIREVIANGEI-----IFK 192
DB 282 PLQFFFPIPTNLQNQNVNALNNPNNDSNSYSHNIDNVINSSNNNNNGNNNNLIVPDGPMQ 341

Db 22 WFTPYTEI-----TSLDTENDEBLLNADVNFTADWCRFSQMSMHPIFE 69
Qy 193 LDDEDIDTQFIMKYESIENTELSQ-SNIEERYKIOSYSYELKDWFNGNDLMLNKYYMEN 251
Db 70 EASDVTKEEPENQVYFARVDCQDHSIAORYRSKPT-LKLE-RNGNMKREY---- 123
Qy 252 AGNNK----SYTKLKDSPVGEI----LTSK----YNQNSKINYRDLYIGEK 293
Db 124 RGRSVKALADYTRQSDPLOERDIAETTLDRSKRNLTGYFQKQDSNYR----- 176
Qy 294 FIRRKHSQSINDIVRKDVYLDLDFNQEMWRYT----YK YFKKEEEKFLAPI 347
Db 177 -VFERVAN-----IHDDCAFLSAFGDVSKEPYSQGDNLIYKPPGHSAFDWYLGAM 227
Qy 348 SDSELYNTIQKEYDEQPTYSC----QLEFKDKESTEDE 383
Db 228 TNFDVTYXWIQDK-----CPLVYREITFENGEEELTEE 259

Qy	199	RTQ-----FIWKKYFSIEN-----TELSQSNIIEERY----KIQSYSEYLKD 235 US-09-881-752A-280
		Sequence 280, Application US/09881752A1
Patent No.	US20020115078A1	
GENERAL INFORMATION:		
APPLICANT: Kieanthous, Harold		
APPLICANT: Al-Garzwi, Amal		
APPLICANT: Miller, Charles		
APPLICANT: Tomb, Jean Francois		
INVENTION: Raymond P.		
TITLE OF INVENTION: Identification of Polynucleotides		
TITLE OF INVENTION: Encoding No. US20020115078A1 Helicobacter Polypeptides in the		
TITLE OF INVENTION: Genome		
FILE REFERENCE: 06132/041002		
CURRENT APPLICATION NUMBER: US/09/881,752A		
CURRENT FILING DATE: 2001-06-15		
PRIOR APPLICATION NUMBER: US 08/833,457		
PRIOR FILING DATE: 1997-04-01		
NUMBER OF SEQ ID NOS: 370		
SOFTWARE: FastSEQ for Windows Version 4.0		
SEQ ID NO: 280		
LENGTH: 751		
TYPE: PRT		
ORGANISM: Helicobacter pylori		
		US-09-881-752A-280
Query	Match	Score 110; DB 10; Length 751;
Best Local Similarity	16.8%	Pred. No. 0.24;
Matches	94;	Mismatches 162; Indels 226; Gaps 25;
Qy	20	KDNNLIDSGYAKVEYDGVELNDKNOEFLTSSANSKIRVTQNQNI-----67
Db	229	RDKNVLPLP-----RVEHTNTIA--REDIK----DNKRVADKEHALDRRIEITKC 276
Qy	68	FNSVYPLDFSV-----SWIRIPKYKND---GIONYIHN-EYIILINC 105
Db	277	TLERFNQATKNNKFNSLACACSKYQAFKEEHDKUATAFYS SANEEIDTLDE 336
Qy	106	KNSGWKWSIRG-----LIWTLDINGRKVSFPEYINRDISEYINRWFYTITNNNA 163
Db	337	NNESACRLD-KSSRDFLEGAIDNYGM-----FGYSFDSIDQKQSYKXDLSQMKER 388
Qy	164	KIYINGKLESNTDIDIREVINGELLIFKLDGIDRQFIW---MRYFSFTNTELSQSN 219
Db	389	KI-----DLMVN-----MLTGFDATRINTLWDKNKYHGQIAFSRANR 431
Qy	220	IEERYK-----IOTSYEYLKDENGPNPLMYKEY 247
Db	432	ILDsvkTGNIVCERDLQDNLALMFGNKDAQSTALLRKYEDLYKGYTDN---NKEY 487
Qy	248	Y-----MFNGNKNNSYIK-----KIDSPVGELIT 272
Db	488	EGYEGLIKRLLTEPPLKPIVSPSQKPKFGLGKILLENLINSFENFKDDYIN--P 544
Qy	273	RSKYNQNSKYINFRDLYGEKFITRKNSNSLNDIV-----310
Db	545	RDEQDYQSYLDYDAMSEK----GDKEEENDDUFETELIKOVENNTDYLNLIE 599
Qy	311	-----BREDDI--YLFNFNQEWRYTYKVKREEEK 341
Db	600	FAKEHGVIEQGVTKIEPLINSSTERLKKDLMDFIKYNDQEVAHFQDYIHQKRE- 658
Qy	342	LELAPISDSELYNTIOKEYDEOPTYSCOLLFFKDEESTDEGLIGHTRYESGIVEE 401

Copyright (c) 1993 - 2002 Compugen Ltd.

OM protein - Protein search, using sw model

Run on: November 1, 2002, 07:20:38 ; Search time 291 Seconds

(without alignments)

974 854 Million cell updates/sec

Scoring table: BLOSUM62

GapOp 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Pending_Patents_NA_Main:*

```

1: /cgn2_6/ptodata/1/paa/BCTUS-COMB.pep:*
2: /cgn2_6/ptodata/1/paa/US06_COMB.pep:*
3: /cgn2_6/ptodata/1/paa/US07_COMB.pep:*
4: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
5: /cgn2_6/ptodata/1/paa/US081_COMB.pep:*
6: /cgn2_6/ptodata/1/paa/US082_COMB.pep:*
7: /cgn2_6/ptodata/1/paa/US083_COMB.pep:*
8: /cgn2_6/ptodata/1/paa/US084_COMB.pep:*
9: /cgn2_6/ptodata/1/paa/US085_COMB.pep:*
10: /cgn2_6/ptodata/1/paa/US086_COMB.pep:*
11: /cgn2_6/ptodata/1/paa/US087_COMB.pep:*
12: /cgn2_6/ptodata/1/paa/US088_COMB.pep:*
13: /cgn2_6/ptodata/1/paa/US089_COMB.pep:*
14: /cgn2_6/ptodata/1/paa/US090_COMB.pep:*
15: /cgn2_6/ptodata/1/paa/US091_COMB.pep:*
16: /cgn2_6/ptodata/1/paa/US092_COMB.pep:*
17: /cgn2_6/ptodata/1/paa/US093_COMB.pep:*
18: /cgn2_6/ptodata/1/paa/US094_COMB.pep:*
19: /cgn2_6/ptodata/1/paa/US095_COMB.pep:*
20: /cgn2_6/ptodata/1/paa/US096_COMB.pep:*
21: /cgn2_6/ptodata/1/paa/US097_COMB.pep:*
22: /cgn2_6/ptodata/1/paa/US098_COMB.pep:*
23: /cgn2_6/ptodata/1/paa/US099_COMB.pep:*
24: /cgn2_6/ptodata/1/paa/US100_COMB.pep:*
25: /cgn2_6/ptodata/1/paa/US101_COMB.pep:*
26: /cgn2_6/ptodata/1/paa/US102_COMB.pep:*
27: /cgn2_6/ptodata/1/paa/US103_COMB.pep:*

```

Pred: No is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	2350	100.0	440	Sequence 8, Appli
2	2350	100.0	440	Sequence 8, Appli
3	2340	99.6	472	Sequence 8, Appli
4	2340	99.6	472	Sequence 8, Appli
5	2340	99.6	472	Sequence 8, Appli
6	2340	99.6	472	Sequence 8, Appli

Result No.	Score	Query Match Length	DB ID	Description
7	2340	99.6	1095	Sequence 7, Appli
8	2340	99.6	1291	Sequence 42, Appli
9	2340	99.6	1291	Sequence 42, Appli
10	2340	99.6	1291	Sequence 42, Appli
11	2340	99.6	1291	Sequence 42, Appli
12	2337	99.4	439	Sequence 5, Appli
13	2283.5	97.2	436	Sequence 42, Appli
14	2227.5	94.8	843	Sequence 42, Appli
15	2102	89.4	472	Sequence 44, Appli
16	2102	89.4	472	Sequence 44, Appli
17	2102	89.4	472	Sequence 44, Appli
18	2099	89.3	1291	Sequence 40, Appli
19	2099	89.3	1291	Sequence 40, Appli
20	2099	89.3	1291	Sequence 4, Appli
21	2099	89.3	1291	Sequence 4, Appli
22	2099	89.3	1291	Sequence 4, Appli
23	2099	89.3	1291	Sequence 4, Appli
24	2099	89.3	1301	Sequence 40, Appli
25	2097	89.2	441	Sequence 4941, A
26	1667	70.9	1169	Sequence 20, Appli
27	1168.5	49.7	449	Sequence 18, Appli
28	1168.5	49.7	449	Sequence 18, Appli
29	1168.5	49.7	473	Sequence 79, Appli
30	1168.5	49.7	473	Sequence 79, Appli
31	1168.5	49.7	473	Sequence 79, Appli
32	1168.5	49.7	1297	Sequence 77, Appli
33	1168.5	49.7	1297	Sequence 77, Appli
34	1168.5	49.7	1297	Sequence 77, Appli
35	1168.5	49.7	1297	Sequence 14, Appli

ALIGNMENTS

RESULT 1

US-09-611-419A-8

SEQUENCE INFORMATION:

GENERAL INFORMATION:

APPLICANT: Smith, Leonard A.

APPLICANT: Byrne, Michael P.

APPLICANT: Middlebrook, John L.

APPLICANT: Lapenotiere, Hugh

APPLICANT: Clayton, Michael A.

APPLICANT: Brown, Douglas R.

TITLE OF INVENTION: NEUROTOXIN

FILE REFERENCE: A33626 067252_0105

CURRENT FILING DATE: 2000-07-06

PRIOR APPLICATION NUMBER: US-09-611-419A

PRIOR FILING DATE: 1999-05-12

PRIOR APPLICATION NUMBER: PCT/US00/12890

PRIOR FILING DATE: 2000-05-12

PRIOR APPLICATION NUMBER: 60/133,866

PRIOR APPLICATION NUMBER: 60/133,867

PRIOR FILING DATE: 1999-05-12

PRIOR APPLICATION NUMBER: 60/133,868

PRIOR FILING DATE: 1999-05-12

PRIOR APPLICATION NUMBER: 60/133,869

PRIOR FILING DATE: 1999-05-12

PRIOR APPLICATION NUMBER: 60/133,870

PRIOR FILING DATE: 1999-07-29

APPLICATION NUMBER: PCT/US97/15394
 FILING DATE:
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Tsigolia, Diane E.
 REGISTRATION NUMBER: 40,027
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-6410
 TELEX/FAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 46:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 472 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 PCT-US97-15394-46

Query Match Score 2340; DB 1; Length 472;
 Best Local Similarity 99.5%; Pred. No. 2.8e-205;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 33 MANKYNSEIINNITILRLYKDNNLIDLSGYAKVEVDGVELNDKNQKLSSANSKIRV 92

Qy 1 MANKYNSEIINNITILRLYKDNNLIDLSGYAKVEVDGVELNDKNQKLSSANSKIRV 60
 Db 93 TQNQNIIFNSYFLDFSVWTRIPKNGDGTQNYTINCKNNSGKWSIRGNRI 152

Qy 61 TQNQNIIFNSYFLDFSVWTRIPKNGDGTQNYTINCKNNSGKWSIRGNRI 120
 Db 121 IWTLIDINGKTKSVEFFYNIREDISYINRWEFTITNNLNNAKYTINGKLESNTDKDI 180

Qy 153 IWTLIDINGKTKSVEFFYNIREDISYINRWEFTITNNLNNAKYTINGKLESNTDKDI 212

Qy 181 REVYANGSEIIFLDGIDDRTOFIWMMKFISFNTELQSNEERKQSYSEYLRDFGNP 240
 Db 213 REVYANGSEIIFLDGIDDRTOFIWMMKFISFNTELQSNEERKQSYSEYLRDFGNP 272

Qy 241 LMVKKEYMFAGNKNYSYIKLKKDSVGELTRSKYQNSKINYRDLYIGEKFIRKS 300
 Db 273 LMVKKEYMFAGNKNYSYIKLKKDSVGELTRSKYQNSKINYRDLYIGEKFIRKS 332

Qy 301 NSQSINDIVRKEDYIYLDFNLNQSWRVTYKFKKEEKLFLAPISDELYNTIQIK 360
 Db 333 NSQSINDIVRKEDYIYLDFNLNQSWRVTYKFKKEEKLFLAPISDEFYNTIQIK 392

Qy 361 EYDEQPPTYSQCLLFFKDEESTDEIGLIGHRFYESSIVEBKDFCISKWLKEVKRKP 420
 Db 393 EYDEQPPTYSQCLLFFKDEESTDEIGLIGHRFYESSIVEBKDFCISKWLKEVKRKP 452

Qy 421 YNLKLGCNWQFIPKDEGWE 440
 Db 453 YNLKLGCNWQFIPKDEGWE 472

RESULT 4
 US-08-704-159-4 6
 Sequence 46, Application US/08704159

GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 INVENTION: Multivalent Vaccine For Clostridium
 TITLE OF INVENTION: Botulinum Neurotoxin
 NUMBER OF SEQUENCES: 82
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medien & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/704,159
 FILING DATE:
 CLASSIFICATION: 424
 ATTORNEY/AGENT INFORMATION:
 NAME: Tsigolia, Diane E.
 REGISTRATION NUMBER: OPHD-02304
 REFERENCE/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 46:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 472 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-704-159-46

Query Match Score 2340; DB 11; Length 472;
 Best Local Similarity 99.5%; Pred. No. 2.8e-205;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANKYNSEIINNITILRLYKDNNLIDLSGYAKVEVDGVELNDKNQKLSSANSKIRV 60
 Db 33 MANKYNSEIINNITILRLYKDNNLIDLSGYAKVEVDGVELNDKNQKLSSANSKIRV 92

Qy 61 TQNQNIIFNSYFLDFSVWTRIPKNGDGTQNYTINCKNNSGKWSIRGNRI 120
 Db 61 TQNQNIIFNSYFLDFSVWTRIPKNGDGTQNYTINCKNNSGKWSIRGNRI 120

Qy 93 TQNQNIIFNSYFLDFSVWTRIPKNGDGTQNYTINCKNNSGKWSIRGNRI 152
 Db 93 TQNQNIIFNSYFLDFSVWTRIPKNGDGTQNYTINCKNNSGKWSIRGNRI 152

Qy 121 IWTLIDINGKTKSVEFFYNIREDISYINRWEFTITNNLNNAKYTINGKLESNTDKDI 180
 Db 121 IWTLIDINGKTKSVEFFYNIREDISYINRWEFTITNNLNNAKYTINGKLESNTDKDI 180

Qy 153 IWTLIDINGKTKSVEFFYNIREDISYINRWEFTITNNLNNAKYTINGKLESNTDKDI 212
 Db 153 IWTLIDINGKTKSVEFFYNIREDISYINRWEFTITNNLNNAKYTINGKLESNTDKDI 212

Qy 181 REVYANGSEIIFLDGIDDRTOFIWMMKFISFNTELQSNEERKQSYSEYLRDFGNP 240
 Db 213 REVYANGSEIIFLDGIDDRTOFIWMMKFISFNTELQSNEERKQSYSEYLRDFGNP 272

Qy 241 LMVKKEYMFAGNKNYSYIKLKKDSVGELTRSKYQNSKINYRDLYIGEKFIRKS 300
 Db 273 LMVKKEYMFAGNKNYSYIKLKKDSVGELTRSKYQNSKINYRDLYIGEKFIRKS 332

Qy 301 NSQSINDIVRKEDYIYLDFNLNQSWRVTYKFKKEEKLFLAPISDELYNTIQIK 360
 Db 333 NSQSINDIVRKEDYIYLDFNLNQSWRVTYKFKKEEKLFLAPISDEFYNTIQIK 392

Qy 361 EYDEQPPTYSQCLLFFKDEESTDEIGLIGHRFYESSIVEBKDFCISKWLKEVKRKP 420
 Db 393 EYDEQPPTYSQCLLFFKDEESTDEIGLIGHRFYESSIVEBKDFCISKWLKEVKRKP 452

Qy 421 YNLKLGCNWQFIPKDEGWE 440
 Db 453 YNLKLGCNWQFIPKDEGWE 472

RESULT 5
 US-10-21-012-46
 Sequence 46, Application US/1027-012
 GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 INVENTION: Multivalent Vaccine For Clostridium
 TITLE OF INVENTION: Botulinum Neurotoxin
 NUMBER OF SEQUENCES: 82
 APPLICANT: Thalley, Bruce S.
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medien & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk

COUNTRY: United States of America
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0,
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/271,012
 FILING DATE: 15-Oct-2002
 CLASSIFICATION: <Unknown>
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US/08/704,159
 ATTORNEY/AGENT INFORMATION:
 NAME: Ingolia, Diane E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 46:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 472 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 46:
 US-10-271-012-46

Query Match 99.6%; Score 2340; DB 26; Length 472;
 Best Local Similarity 99.5%; Pred. No. 2,8e-205;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANKNSELLNNTLNRLKDNNLIDLSGGAKVEVDGVELNDKQFLKTSSANSKIRV 60
 Db 33 MANKNSELLNNTLNRLKDNNLIDLSGGAKVEVDGVELNDKQFLKTSSANSKIRV 92

Qy 61 TQNQNTIENSVFELDSVSPWIRPKYKNDQNYIHNEYTIINCNGNWKISLRGNRI 120
 Db 93 TQNQNTIENSVFELDSVSPWIRPKYKNDQNYIHNEYTIINCNGNWKISLRGNRI 152

Qy 121 IWTLIDINGRKTYSFFEYNIREDISYEYINRWFVTINLNNAKITYINGKLESNTDKDI 180
 Db 153 IWTLIDINGRKTYSFFEYNIREDISYEYINRWFVTINLNNAKITYINGKLESNTDKDI 212

Qy 181 REVANGETIFKLQDIDRTOFIMKYSIENTELSSNIEERYKQSYSEYLKDGFWGNP 240
 Db 213 REVANGETIFKLQDIDRQFIWMKYSIENTELSSNIEERYKQSYSEYLKDGFWGNP 272

Qy 241 LMYNKYYMAGNNSYIKLKDSPGEILTRSKYNNQSKINYRDLYIGKFIRTRKS 300
 Db 273 LMYNKYYMAGNNSYIKLKDSPGEILTRSKYNNQSKINYRDLYIGKFIRTRKS 332

Qy 301 NSQSINDDIVRKEDYTYLDFFNLNOEWRYTYKYKEEEKFLAPTSDELYNTIQK 360
 Db 333 NSQSINDDIVRKEDYTYLDFFNLNOEWRYTYKYKEEEKFLAPTSDFNTIQK 392

Qy 361 EYDEQPTYSCOLFKDEESTDEGLIGTHRFESGIVFEYKDYFCISKWLKEYRK 420
 Db 393 EYDEQPTYSCOLFKDEESTDEGLIGTHRFESGIVFEYKDYFCISKWLKEYRK 452

Qy 421 YNLKGCGNWQFIPKDEGWTE 440
 Db 453 YNLKGCGNWQFIPKDEGWTE 472

APPLICANT: Clayton, Michael A
 APPLICANT: Brown, Douglas R
 TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE
 TITLE OF INVENTION: AGAINST C. BOTULINUM
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS: 6
 ADDRESSEE: John F. Moran
 STREET: Off. of Command Jdg. Adv.
 CITY: Frederick
 STATE: Maryland
 COUNTRY: USA
 ZIP: 21702-5012
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/123,975A
 FILING DATE: 21-SEP-1993
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Hendricks, Glenna
 REGISTRATION NUMBER: 32,535
 REFERENCE/DOCKET NUMBER: mid.1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (301) 619-2055
 TELEFAX: (301) 619-7714
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 850 amino acids
 TYPE: peptide
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 HYPOTHETICAL: NO
 FRAGMENT TYPE: N-terminal
 ORIGINAL SOURCE:
 ORGANISM: heavy chain of serotype B botulinum toxin
 US-08-123-975A-2

Query Match 99.6%; Score 2340; DB 26; Length 850;
 Best Local Similarity 99.5%; Pred. No. 6,6e-205;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANVYNSETLNNTLNRLYKDNNLIDLSGGAKVEVDGVELNDKQFLKTSSANSKIRV 60
 Db 411 MFNKNYSEELLNNTLNRLYKDNNLIDLSGGAKVEVDGVELNDKQFLKTSSANSKIRV 470

Qy 61 TQNQNIENSVFELDSVSPWIRPKYKNDQNYIHNEYTIINCNGNWKISLRGNRI 120
 Db 471 TQNQNIENSVFELDSVSPWIRPKYKNDQNYIHNEYTIINCNGNWKISLRGNRI 530

Qy 121 IWTLIDINGRKTYSFFEYNIREDISYEYINRWFVTINLNNAKITYINGKLESNTDKDI 180
 Db 531 IWTLIDINGRKTYSFFEYNIREDISYEYINRWFVTINLNNAKITYINGKLESNTDKDI 590

Qy 181 REVANGETIFKLQDIDRTOFIMKYSIENTELSSNIEERYKQSYSEYLKDGFWGNP 240
 Db 591 REVANGETIFKLQDIDRTOFIMKYSIENTELSSNIEERYKQSYSEYLKDGFWGNP 650

Qy 241 LMYNEYMMAGNNSYIKLKDSPGEILTRSKYNNQSKINYRDLYIGKFIRTRKS 300
 Db 651 LMYNEYMMAGNNSYIKLKDSPGEILTRSKYNNQSKINYRDLYIGKFIRTRKS 710

Qy 301 NSQSINDDIVRKEDYTYLDFFNLNOEWRYTYKYKEEEKFLAPTSDELYNTIQK 360
 Db 711 NSQSINDDIVRKEDYTYLDFFNLNOEWRYTYKYKEEEKFLAPTSDELYNTIQK 770

RESULT 6
 US-08-123-975A-2
 Sequence 2, Application US/08123975A
 GENERAL INFORMATION:
 APPLICANT: Middlebrook, John L
 APPLICANT: LaPenotiere, Hugh F

Qy 421 YNLKIGCNQFIPKDEGWE 440
 Db 831 YNLKIGCNQFIPKDEGWE 850

RESULT 7
 Sequence 4, Application US/09831050
 GENERAL INFORMATION:
 APPLICANT: SHONE, Clifford Charles
 APPLICANT: SUTTON, John Mark
 APPLICANT: HALLIS, Bassam
 APPLICANT: SILMAN, Nigel
 TITLE OF INVENTION: Delivery of Superoxide Dismutase to Neuronal Cells
 FILE REFERENCE: 1581 0800000
 CURRENT APPLICATION NUMBER: US/09/931,050
 CURRENT FILING DATE: 1999-11-05
 PRIOR APPLICATION NUMBER: PCT/GB99/03699
 PRIOR FILING DATE: 1998-11-05
 NUMBER OF SEQ ID NOS: 11
 SEQ ID NO: 4
 LENGTH: 1070
 TYPE: PR
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence:construct
 US-09-910-050-4

Query Match 99.5%; Score 2340; DB 22;
 Best Local Similarity 99.5%; Pred. No. 9.3e-205;
 Matches 438; Conservative 0; Mismatches 2;
 Indels 0; Gaps 0;

Qy 1 MANKYSEINNITLNRLYKDNNLIDSGYGAKVEYDGVELNDKNOKFLTSSANSKIRV 60
 Db 631 MANKYSEINNITLNRLYKDNNLIDSGYGAKVEYDGVELNDKNOKFLTSSANSKIRV 690

Query Match 99.5%; Score 2340; DB 22;
 Best Local Similarity 99.5%; Pred. No. 9.3e-205;
 Matches 438; Conservative 0; Mismatches 2;
 Indels 0; Gaps 0;

Qy 1 MANKYSEINNITLNRLYKDNNLIDSGYGAKVEYDGVELNDKNOKFLTSSANSKIRV 60
 Db 631 MANKYSEINNITLNRLYKDNNLIDSGYGAKVEYDGVELNDKNOKFLTSSANSKIRV 690

Qy 61 TQNQNIENSFLDFSYFWIRPKYNDGIONYIHEYTINCMKNSGMKISRGNRI 120
 Db 691 TQNQNIENSFLDFSYFWIRPKYNDGIONYIHEYTINCMKNSGMKISRGNRI 750

Query Match 99.5%; Score 2340; DB 22;
 Best Local Similarity 99.5%; Pred. No. 9.3e-205;
 Matches 438; Conservative 0; Mismatches 2;
 Indels 0; Gaps 0;

Qy 1 MANKYSEINNITLNRLYKDNNLIDSGYGAKVEYDGVELNDKNOKFLTSSANSKIRV 60
 Db 751 TQNQNIENSFLDFSYFWIRPKYNDGIONYIHEYTINCMKNSGMKISRGNRI 810

Qy 181 REVANGELIFKLDSDIDRQFIMMKFSIFNTLSQSNTESQSYLKEFWGNP 240
 Db 811 REVANGELIFKLDSDIDRQFIMMKFSIFNTLSQSNTESQSYLKEFWGNP 240

Qy 241 LMYKEYYMFENAGKNSYIKLKDSPGEILTRSKYQNSKVINYDLYIGEKFIRRK 300
 Db 871 LMYKEYYMFENAGKNSYIKLKDSPGEILTRSKYQNSKVINYDLYIGEKFIRRK 930

Qy 301 NSQSINDDIVRKTYLDFDNQENRVTYKYFKEEEKFLAPTSDSDELYNTIQK 360
 Db 931 NSQSINDDIVRKTYLDFDNQENRVTYKYFKEEEKFLAPTSDSDEFTYNTIQK 990

Qy 361 EYDEQPTYSQCLLFKDEESTDEGLIGHRYFSEGGVFEYDYFCISKWYKEYRK 420
 Db 991 EYDEQPTYSQCLLFKDEESTDEGLIGHRYFSEGGVFEYDYFCISKWYKEYRK 1050

Qy 421 YNLKIGCNQFIPKDEGWE 440
 Db 1051 YNLKIGCNQFIPKDEGWE 1070

Qy 301 NSQSINDDIVRKTYLDFDNQENRVTYKYFKEEEKFLAPTSDSDELYNTIQK 360
 Db 931 NSQSINDDIVRKTYLDFDNQENRVTYKYFKEEEKFLAPTSDSDEFTYNTIQK 990

Qy 361 EYDEQPTYSQCLLFKDEESTDEGLIGHRYFSEGGVFEYDYFCISKWYKEYRK 420
 Db 991 EYDEQPTYSQCLLFKDEESTDEGLIGHRYFSEGGVFEYDYFCISKWYKEYRK 1050

Qy 421 YNLKIGCNQFIPKDEGWE 440
 Db 1051 YNLKIGCNQFIPKDEGWE 1070

RESULT 8
 US-09-910-050-7
 Sequence 7, Application US/09831050
 GENERAL INFORMATION:
 APPLICANT: SHONE, Clifford Charles
 APPLICANT: SUTTON, John Mark
 APPLICANT: HALLIS, Bassam

APPLICANT: Thalley, Bruce S.
 GENERAL INFORMATION:
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 NUMBER OF SEQUENCES: 82
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medien & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US97/15394
 FILING DATE:
 CLASSIFICATION:
 NAME: Ingolia, Diane E.
 REGISTRATION NUMBER: 40,027
 INFORMATION FOR DOCKET NUMBER: OPHD-02304
 TELEFAX: (415) 705-8410
 TELEX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 42:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1291 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 PCT-US97-15394-42

Query Match Similarity 99.5%; Score 2340; DB 1; Length 1291;
 Best Local Similarity 99.5%; Pred. No. 1.2e-204; Indels 0; Gaps 0;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANKYNESEIINNITLNLRYKDNNILDSGYAKVEYDGVELNDKNGKLSSANSKIRV 60
 Db 852 MANKYNESEIINNITLNLRYKDNNILDSGYAKVEYDGVELNDKNGKLSSANSKIRV 911
 Qy 61 TQNQNTIFNSVFLDFSVSFWRIPKYKNDGIONYIHNNEYTIINCMKNNSGWIKISRGNR 120
 Db 912 TQNQNTIFNSVFLDFSVSFWRIPKYKNDGIONYIHNNEYTIINCMKNNSGWIKISRGNR 971
 Qy 121 IWTLLIDINGKTKSYFFEYNREDSEYINRWFETITNNLNNAKITYNGKLESNTDIKDI 180
 Db 972 IWTLLIDINGKTKSYFFEYNREDSEYINRWFETITNNLNNAKITYNGKLESNTDIKDI 1031
 Qy 181 REVITANGELEIFKLDGIDRTQFIWKYFSIENTELQSNEIEERYKIQSYSEYLDFWGNP 240
 Db 1032 REVITANGELEIFKLDGIDRTQFIWKYFSIENTELQSNEIEERYKIQSYSEYLDFWGNP 1091
 Qy 241 LMNKKEYMFAGKNSYIILKKDSPGEILTRSKYQNSKINYRDLYIGKFIRRK 300
 Db 1092 LMNKKEYMFAGKNSYIILKKDSPGEILTRSKYQNSKINYRDLYIGKFIRRK 1151
 Qy 301 NSQSINDIVKEDTYLDFFNLNBWRVTTYKFKEEKEKFLAPTSDELYNTQIK 360
 Db 1152 NSQSINDIVKEDTYLDFFNLNBWRVTTYKFKEEKEKFLAPTSDELYNTQIK 1211
 Qy 361 EYDEQPPTYSQOLLKFRKDEESTDEIGLIGHRFPEEYKDYFCITSKWYKEYRK 420
 Db 1212 EYDEQPPTYSQOLLKFRKDEESTDEIGLIGHRFPEEYKDYFCITSKWYKEYRK 1271
 Qy 421 YNLKGNCNWQFIPKDGWTE 440
 Db 1272 YNLKGNCNWQFIPKDGWTE 1291

RESULT 10
 US-08-704-159-42
 Sequence 42, Application US/08704159
 GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 ATTALIEY, Bruce S.
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 NUMBER OF SEQUENCES: 82
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medien & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America

ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: FLOPPY disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/704,159
 FILING DATE:
 CLASSIFICATION: 424
 ATTORNEY/AGENT INFORMATION:
 NAME: Ingolia, Diane E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 42:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1291 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-704-159-42

Query Match Similarity 99.6%; Score 2340; DB 11;
 Best Local Similarity 99.5%; Pred. No. 1.2e-204;
 Matches 438; Conservative 0; Mismatches 2;
 Indels 0; Gaps 0;

Qy 1 MANKYNESEIINNITLNLRYKDNNILDSGYAKVEYDGVELNDKNGKLSSANSKIRV 60
 Db 852 MANKYNESEIINNITLNLRYKDNNILDSGYAKVEYDGVELNDKNGKLSSANSKIRV 911
 Qy 61 TQNQNTIFNSVFLDFSVSFWRIPKYKNDGIONYIHNNEYTIINCMKNNSGWIKISRGNR 120
 Db 912 TQNQNTIFNSVFLDFSVSFWRIPKYKNDGIONYIHNNEYTIINCMKNNSGWIKISRGNR 971
 Qy 121 IWTLLIDINGKTKSYFFEYNREDSEYINRWFETITNNLNNAKITYNGKLESNTDIKDI 180
 Db 972 IWTLLIDINGKTKSYFFEYNREDSEYINRWFETITNNLNNAKITYNGKLESNTDIKDI 1031
 Db 972 IWTLLIDINGKTKSYFFEYNREDSEYINRWFETITNNLNNAKITYNGKLESNTDIKDI 1031
 Qy 181 REVITANGELEIFKLDGIDRTQFIWKYFSIENTELQSNEIEERYKIQSYSEYLDFWGNP 240
 Db 1032 REVITANGELEIFKLDGIDRTQFIWKYFSIENTELQSNEIEERYKIQSYSEYLDFWGNP 1091
 Qy 241 LMNKKEYMFAGKNSYIILKKDSPGEILTRSKYQNSKINYRDLYIGKFIRRK 300
 Db 1092 LMNKKEYMFAGKNSYIILKKDSPGEILTRSKYQNSKINYRDLYIGKFIRRK 1151
 Qy 301 NSQSINDIVKEDTYLDFFNLNBWRVTTYKFKEEKEKFLAPTSDELYNTQIK 360
 Db 1152 NSQSINDIVKEDTYLDFFNLNBWRVTTYKFKEEKEKFLAPTSDELYNTQIK 1211
 Qy 361 EYDEQPPTYSQOLLKFRKDEESTDEIGLIGHRFPEEYKDYFCITSKWYKEYRK 420
 Db 1212 EYDEQPPTYSQOLLKFRKDEESTDEIGLIGHRFPEEYKDYFCITSKWYKEYRK 1271
 Qy 421 YNLKGNCNWQFIPKDGWTE 440
 Db 1272 YNLKGNCNWQFIPKDGWTE 1291

RESULT 11
 US-10-271-012-42
 Sequence 42, Application US/10271012
 GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 ATTALIEY, Bruce S.
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 NUMBER OF SEQUENCES: 82
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medien & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America

STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/271.012
 FILING DATE: 15-Oct-2002
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/08/704.159
 FILING DATE: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: Ingolia, Diane E.
 REGISTRATION NUMBER: 40,027
 REPOSITORY/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 42:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1291 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 42:
 US-10-271-012-42

Query Match 99.6%; Score 2340; DB 26; Length 1291;
 Best Local Similarity 99.5%; Prey. No. 1.e-204;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANKYNSPEILNNTLNRYKDNNLIDLSGYAKVEVDGVELNDKQFLTSSANSKRV 60
 Db 852 MANKYNSPEILNNTLNRYKDNNLIDLSGYAKVEVDGVELNDKQFLTSSANSKRV 911

Qy 61 TONQNLIIFNSVLDFSVWIRPKYKNDQIINYTHNEYTTINCMKNNSGWKTSIRGNRI 120
 Db 912 TONQNLIIFNSVLDFSVWIRPKYKNDQIINYTHNEYTTINCMKNNSGWKTSIRGNRI 971

Qy 121 TWLIDINGKTKSVFPEYNIREDISYEINRWEFTITNNLNNAKYTINGKLENTDKDI 180
 Db 972 TWLIDINGKTKSVFPEYNIREDISYEINRWEFTITNNLNNAKYTINGKLENTDKDI 1031

Qy 181 REVANGELIIFKLDGIDDRTOFIWKYFSIENTELQSNSTEERYKIQSYSEYLKDENGNP 240
 Db 1032 REVANGELIIFKLDGIDDRTOFIWKYFSIENTELQSNSTEERYKIQSYSEYLKDENGNP 1091

Qy 241 LMNKKEYMFAGNKNKYIKLKQSPGEILTRSKYQNNSKYNYRDLYIGEKFPIRK 300
 Db 1092 LMNKKEYMFAGNKNKYIKLKQSPGEILTRSKYQNNSKYNYRDLYIGEKFPIRK 1151

Qy 301 NSOSINDIVKEDYIYLDFNLNQEWRYTYKFKKEEKLFLAPISDELYNTQIK 360
 Db 1152 NSOSINDIVKEDYIYLDFNLNQEWRYTYKFKKEEKLFLAPISDELYNTQIK 1211

Qy 361 EYDEQPHTYSQCLLFKDEESTDEIGLIGHTRFYESGIVEEYKDYFCISKWLKEYKRKP 420
 Db 1212 EYDEQPHTYSQCLLFKDEESTDEIGLIGHTRFYESGIVEEYKDYFCISKWLKEYKRKP 1271

Qy 421 YNLKLGCRNWQFIPKDGWTE 440
 Db 1272 YNLKLGCRNWQFIPKDGWTE 1291

RESULT 12
 US-08-123-95A-5
 Sequence 5, Application US/08123975A

GENERAL INFORMATION:
 APPLICANT: Middlebrook, John L
 APPLICANT: LaPenciere, Hugh F
 APPLICANT: Clayton, Michael A
 APPLICANT: Brown, Douglas R
 TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: John F. Moran
 STREET: Off. of Command Jdg. Adv.
 CITY: Frederick
 STATE: Maryland
 COUNTRY: USA
 ZIP: 21702-0112
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/123.975A
 FILING DATE: 21-SEP-1993
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Hendricks, Glenna
 REGISTRATION NUMBER: 32,535
 REFERENCE/DOCKET NUMBER: mid.1
 TELEPHONE: (301) 619-2065
 TELEFAX: (301) 619-7714
 SEQUENCE CHARACTERISTICS:
 LENGTH: 439 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 HYPOTHETICAL: NO
 ANTI-SENSE: NO
 FRAGMENT TYPE: N-terminal
 ORIGINAL SOURCE: Clostridium botulinum toxin
 ORGANISM: Clostridium botulinum toxin
 US-08-123.975A-5

Query Match 99.4%; Score 2337; DB 5; Length 439;
 Best Local Similarity 99.8%; Prey. No. 4.7e-205;
 Matches 437; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 NKNYSPLNNNTLNRYKDNNLIDLSGYAKVEVDGVELNDKQFLTSSANSKRV 62
 Db 2 NKNYSPLNNNTLNRYKDNNLIDLSGYAKVEVDGVELNDKQFLTSSANSKRV 61

Qy 63 NONIENSPVLDFSVWIRPKYKNDQIINYTHNEYTTINCMKNNSGWKTSIRGNRIW 122
 Db 62 NONIENSPVLDFSVWIRPKYKNDQIINYTHNEYTTINCMKNNSGWKTSIRGNRIW 121

Qy 123 TLIDINGKTKSVFPEYNIREDISYEINRWEFTITNNLNNAKYTINGKLENTDKDI 182
 Db 122 TLIDINGKTKSVFPEYNIREDISYEINRWEFTITNNLNNAKYTINGKLENTDKDI 181

Qy 183 VIANGELIIFKLDGIDDRTOFIWKYFSIENTELQSNSTEERYKIQSYSEYLKDENGNP 242
 Db 182 VIANGELIIFKLDGIDDRTOFIWKYFSIENTELQSNSTEERYKIQSYSEYLKDENGNP 241

Qy 243 YNKKEYMFAGNKNKYIKLKQSPGEILTRSKYQNNSKYNYRDLYIGEKFPIRK 302
 Db 242 YNKKEYMFAGNKNKYIKLKQSPGEILTRSKYQNNSKYNYRDLYIGEKFPIRK 301

Qy 303 QSNINDIVKEDYIYLDFNLNQEWRYTYKFKKEEKLFLAPISDELYNTQIK 362
 Db 302 QSNINDIVKEDYIYLDFNLNQEWRYTYKFKKEEKLFLAPISDELYNTQIK 361

RESULT 13
US-09-611-419A-40

Sequence 40, Application US/09611419A
GENERAL INFORMATION:
APPLICANT: Smith, Leonard A.
APPLICANT: Middlebrook, John L.
APPLICANT: Lapenotiere, Hugh
APPLICANT: Clayton, Michael A.
APPLICANT: Brown, Douglas R.
TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
FILE REFERENCE: A33625 057252 0105
CURRENT APPLICATION NUMBER: US/09/611,419A
CURRENT FILING DATE: 2000-07-06
PRIOR APPLICATION NUMBER: PCT/US00/12890
PRIOR FILING DATE: 2000-05-12
PRIOR APPLICATION NUMBER: 60/133,865
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,866
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,867
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,868
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,869
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/146,192
PRIOR FILING DATE: 1999-07-29
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO: 40
LENGTH: 436
TYPE: PRT
ORGANISM: Clostridium botulinum
US-09-611-419A-40

Query Match 97.2%; Score 2283.5; DB 20; Length 436;
Best Local Similarity 99.1%; Pred. No. 3.8e-200; Indels 3; Gaps 3;
Matches 434; Conservative 0; Mismatches 1;

3 NKYNSELINNITLRYKDNNLIDLSGYAKVEYDGVELNDKNQFLLTSSANSKIRVTQ 62
2 NKYNSELINNITLRYKDNNLIDLSGYAKVEYDGVELNDKNQFLLTSSANSKIRVTQ 61

QY 63 NONIIFNSVFLDSVSEWIRPKYANDGIONYIHNETYTLNCMKNNSGMKISTRGRNWI 122
Db 62 NONIIFNSVFLDSVSEWIRPKYANDGIONYIHNETYTLNCMKNNSGMKISTRGRNWI 120

QY 123 TLIDINGKTKSVFENIREDISEYINRWFVTINLNNAKYINGKLESNTDIKIRE 182
Db 121 TLIDINGKTKSVFENIREDISEYINRWFVTINLNNAKYINGKLESNTDIKIRE 180

QY 183 VIANGEIIFKLDGDIDRTQFIWMKYSIENTELSOSNIERYTQSYSEYLDFWGPNM 242
Do 181 VIANGEIIFKLDGDIDRTQFIWMKYSIENTELSOSNIERYTQSYSEYLDFWGPNM 240

QY 243 YNEKEYMFAGNKNSYIKLKDPGELTRSKYQNNSKYINRDLYIGEKFIRRSNS 302
Db 241 YNEKEYMFAGNKNSYIKLKDPGELTRSKYQNNSKYINRDLYIGEKFIRRSNS 300

QY 303 OSINDIVRKEDYTYDFFENQEMRVYTQYKEEEKLFLAPISOSDELYTIQKEY 362
Db 301 OSINDIVRKEDYTYDFFENQEMRVYTQYKEEEKLFLAPISOSDEFTYTIQKEY 358

RESULT 14
US-09-611-419A-42

Sequence 42, Application US/09611419A
GENERAL INFORMATION:
APPLICANT: Smith, Leonard A.
APPLICANT: Middlebrook, John L.
APPLICANT: Lapenotiere, Hugh
APPLICANT: Clayton, Michael A.
APPLICANT: Brown, Douglas R.
TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
FILE REFERENCE: A33626 067252 0105
CURRENT APPLICATION NUMBER: US/09/611,419A
CURRENT FILING DATE: 2000-07-06
PRIOR APPLICATION NUMBER: PCT/US00/12890
PRIOR FILING DATE: 2000-05-12
PRIOR APPLICATION NUMBER: 60/133,865
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,866
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,867
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,868
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,869
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/146,192
PRIOR FILING DATE: 1999-07-29
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO: 42
LENGTH: 843
TYPE: PRT
ORGANISM: Clostridium botulinum
US-09-611-419A-42

Query Match 94.8%; Score 2227.5; DB 20; Length 843;
Best Local Similarity 98.0%; Pred. No. 1.e-194; Indels 7; Gaps 7;
Matches 431; Conservative 0; Mismatches 2;

1 MANKNSELINNITLRYKDNNLIDLSGYAKVEYDGVELNDKNQFLLTSSANSKIRV 60
Db 411 MFNKYNSSELINNITLRYKDNNLIDLSGYAKVEYDGVELNDKNQFLLTSSANSKIR- 69
Qy 61 TQNQNUTIFNSVFLDSVSEWIRPKYANDGIONYIHNETYTLNCMKNNSGMKISTRGRNWI 120
Db 470 TQNQNUTIFNSVFLDSVSEWIRPKYANDGIONYIHNETYTLNCMKNNSGMKISTR-RI 528

Qy 121 IWTLIDINGKTKSVFENIREDISEYINRWFVTINLNNAKYINGKLESNTDIKIDI 180
Db 529 IWTLIDINGKTKSVFENIREDISEYINRWFVTINLNNAKYINGKLESNTDIKIDI 588

Qy 181 REVANGEIIFKLDGDIDRTQFIWMKYSIENTELSOSNIERYTQSYSEYLDFWGPNP 240
Db 589 REVANGEIIFKLDGDIDRTQFIWMKYSIENTELSOSNIERYTQSYSEYLDFWGPNP 648

Qy 241 LMNEYKYMAGNKNSYIKLKDPGELTRSKYQNNSKYINRDLYIGEKFIRRSNS 300
Db 649 LMNEYKYMAGNKNSYIKLKDPGELTRSKYQNNSKYINRDLYIGEKFIRRSNS 708

Qy 301 NSQSINDIVRKEDYTYDFFENQEMRVYTQYKEEEKLFLAPISOSDEFNTYTIQKEY 360

Db 709 NSQSINDIVRKYDYLDFEFLNQEWRYTYKFKKEEE-LFLAPPSSDEFYNTIQQIK 767
 Qy 361 BYDEQPTYSQCOLLKDEESTDEGLIGLHRFVESGIVFEEKYDFCTSKWLLKEVTKRP 420
 Db 768 EYDEQPTYSQCOLLKDEESTDEGLIGLHRFVESGIVFEEKYDFCTSKWLLKEVTKRP 823
 Qy 421 YNLKLGICNQFIPKDEGT 440
 Db 824 YNLKLGICNQFIPKDEGT 843

RESULT 15
 PCT-US97-15394-44
 Sequence 44, Application PC/TUS9715394
 GENERAL INFORMATION:
 APPLICANT: Williams, James A.
 APPLICANT: Threlley, Bruce S.
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 NUMBER OF SEQUENCES: 82
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Medlen & Carroll
 STREET: 220 Montgomery Street, Suite 2200
 CITY: San Francisco
 STATE: California
 COUNTRY: United States of America
 ZIP: 94104

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentnet Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US97/15394
 FILING DATE:
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Togolla, Diane E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-02304
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 44:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 472 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: Protein
 PCT-US97-15394-44

Query Match 89 4%; Score 2102; DB 1; Length 472;
 Best Local Similarity 88.6%; Pred. No. 1.9e-183;
 Matches 390; Conservative 26; Mismatches 24; Indels 0; Gaps 0;

Qy 1 MANKYNSSEILNNITILNRYKDNNLIDSLSGAKVEYDGVELNDKNGOKLTSSANSKIRY 60
 Db 33 MFNKYNSSEILNNITILNRYDRDNLLIDSLSGAKVEYDGVLNDKNGOKLTSSADSKIRV 92

Qy 61 TQNQNTTENSYLDSVSFWRIPKNGDQNYHNEYTINCMKNSGKWSIRNR 120
 Db 93 TQNQNTTENSMFLDFSVSFWRIPKRNDDQNYHNEYTINCMKNSGKWSIRNR 152

Qy 121 TWTLIDINGTKSVFPEYNREDSEYINRWFVTITNNNAKAYINGKLESNTDKDI 180
 Db 153 IWTLIDINGTKSVFPEYNREDSEYINRWFVTITNNDAKAYINGTLESNMOKDI 212

Qy 181 REVIAANGEITFRKGDDIDRFQFIMKYSFNTLBSNTEYKIQSYSEYLKDFTGNP 240
 Db 213 GEVINGETPKLGDVDTQFIMKYSFNTLQNSNIKEYKIQSYSEYLKDFTGNP 272

Qy 273 LMNKYXMFAGKNSYIKLYKDSVGEILRSKYNQNSNYINVRNLYIGEKFIRRES 332
 Qy 301 NSQSINDIVRKYDYLDFEFLNQEWRYTYKFKKEEE-LFLAPPSSDEFYNTIQQIK 360
 Db 333 NSQSINDIVRKYDYLDFEFLNQFQEEKFLSISDSNEFYKIEIK 392

Qy 361 EYDBQPTYSQCOLLKDEESTDEGLIGLHRFVESGIVFEEKYDFCTSKWLLKEVTKRP 420
 Db 393 EYDBQPSYSQCOLLKDEESTDDIGLIGLHRFVESGVLRKYYKDYFCISKWLLKEVTKRP 452

Qy 421 YNLKLGICNQFIPKDEGT 440
 Db 453 YKSNLGICNQFIPKDEGT 472

Search completed: November 1, 2002, 08:22:56
 Job time : 294 secs

פְּנֵי יְהוָה בְּבִירַעַת כְּלֹמְדָה וְלִשְׁבָּתָה

maximum DB seq length: 0
maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

```
Pending_Patents_AA_New *  
1: /cgn2_6/pctodata/1/paa/P  
2: /cnr2_6/pctodata/1/paa/U  
3: /cnr2_6/pctodata/1/paa/U  
4: /cnr2_6/pctodata/1/paa/U
```

```
5: /cgn2-6/ptodata/1/paa/u  
6: /cgn2-6/ptodata/1/paa/u  
7: /cgn2-6/ptodata/1/paa/u
```

No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed. It is derived by analysis of the total score distribution.

Db 540 QNEI--EKIYNNWKEKKNNIEKRAIKSLDDIEGKTKEDEIAHEYETEQKQIT--SIEP 595
 Qy 291 GEKFTIRKGSNSQST-NDIVKEDYIYL--DEFNQNQEWVVTYKVFKEEKFLLFLAP 346
 Db 596 LETQISRVTSIELENRQIOLKEDEOLKNLNRCKYKINRVLK-OVNIIQP 654
 Qy 347 ISDSDPNTIQUIKEYDECPYSCQLFLPKDEESTDEIGLIGHRFYEFKID 404
 Db 655 YANYNNLIELFK---EENGLGSTLWIKNQSENPKEFKLIRDSEAYEYKD 708

RESULT 2
 US-10-092-411A-2942 Application US/10092411A
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 FILE REFERENCE: 032796-101
 CURRENT APPLICATION NUMBER: US/10/092,411A
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134,001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: US 60/064,964
 PRIOR FILING DATE: 1997-11-08
 PRIOR APPLICATION NUMBER: US 60/055,779
 NUMBER OF SEQ ID NOS: 5676
 SEQ ID NO: 293
 LENGTH: 912
 TYPE: PRT
 ORGANISM: Staphylococcus epidermidis
 US-10-092-411A-2933

Query Match Score 4.9% ; Best Local Similarity 19.8%; Pred. No. 2,1; Gaps 26;
 Matches 10; Conservative 78; Mismatches 170; Indels 164; Gaps 26;

Qy 1 MANKYNSETLNNTLNRYKDNNLIDLSGYAKVEYDGVELNDKNOFLKTSSANSKIRV 60
 Db 439 LIDYNN-----NLVYKHPRNRETHSFGDKYLYE---NEGIMTSIKS---IKL 482
 Qy 61 TONGNLIENSVELDSFSFWIRIPKVKNDGICONYHNEYLTINCWNKNNSGWKISR--GN 118
 Db 483 LSNSNVEGYS---NSFNEW-----LNNEYTSLDCERK--EILRMFSN 521
 Qy 119 RIIFTLIDINGKTKSVEFFENYRIDESEYINNEWF --YIITNNUNNAKIYINGALE-SN 174
 Db 522 SKTINNNYGAAGTCST-----LHNHCNFYFDKVITANNTAVNIKRIKLSN 572
 Qy 175 TDIDIREVTAANGE----IIFKLGD-----DRTOFIWMKYSINTNELSQSNIDERYKI 226
 Db 573 IKTISTKPLYNDREKYLILLDEAGYVSNKDMNTRILENQFELLII----VGDNYQI 626
 Qy 227 QS-----YSEYLKDFWGNGPLMNEYMFNAGNKNSYIUK---KDPVGEITRSKY- 276
 Db 627 ESIDFGNWEETAKDVLSKNII-NEILDMDYRTKNDLFYWSVREKSNLNEITMMKYS 685
 Qy 277 -----NQNSK-----YINYRDY-IGEKFRRKTSNSNSINDDIVRKEDYIYLDFFN 322
 Db 686 TRIDESINEFNKEDEIILCNDYGIYINN--INRLQANNKNDSVI-----730
 Qy 323 LNQEMRVTYTYKFKEEKLFLAPISDSELYNT----IOKEYDQEPTYSCOL-----372
 Db 731 ---WGV---KEYXGDPILLENNTNKYSPILLENNLKGSIIEHVFEYIITLEINKVIN 783
 Qy 373 -----LFFKDEBTDEI-----GJIGIHR-----391
 Db 784 ELDLISLEDLISSSENSSVIRVEKSDGLNDNDSSD1VPPFOVSYAISIHQAQGLE 843
 Qy 392 FYESSGIVFEEYKDYFCISKWYLKEVKRPYNUKL 425
 Db 844 FNSTKIVISDLDQIOTNNIYTATRARENKL 877

RESULT 4
 US-10-092-411A-5080
 Sequence 5080, Application US/10092411A
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 FILE REFERENCE: 032796-101
 CURRENT APPLICATION NUMBER: US/10/092,411A
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134,001

RESULT 3
 US-10-092-411A-2993

1 LYSSIDITKRRIMKKSVRLYNNMIEYCNERNFKLNDLMSEFNISRSTALDRIKEIEALGV 60
 84 PYKNDGTONYIHNENTIINOMKNSGKWSIRGNR--LIWLLIDNGTKSVFFEYN 140
 61 PLYSNPQ---KNG3TIG--NRDQTKTAITDEKLAVFTLSSISVSNLPF---- 108
 QY 141 REDISEYINRWAFTITNNLNNAKITYINGKLESNDIKDIREVANGELIFKLDGDIDRT 200
 Db 109 QTEYQEILKLY--NNSNK-----KELLINQNDLFQFNE-DKY 144
 QY 201 QFIWMKLYFSIETELSSOSNTERYKIQSYSE-YLKRD-FWGNPLMY-NKEYYMNAGNKN 257
 Ddb 145 QF--KSXKLEN-EIRLRLIENKSFTFCYQNYIKEQYKIGIMYKHNHWFYVANIESK 200
 QY 258 YIKLKDPSVYBILTRSKYKNSKYINRDLYGEKFILR-----KSNSOSINDDI 309
 Ddb 201 LVNLNTISKIELYENGE-TQECDNTMONE--QEMYVNKNETADILIRSNYGLN--I 254
 QY 310 VRKEDYIYLDFDNLNQEWRYTYKPKKEEEKLFLA-----PISDSDELYNTQI 359
 Db 255 LK-GYLRSMDMIEENTDEETLFSKSVNARDIDTAKLIVTGGVNVKVETPNSLKNAAVK 312
 Qy 360 K 360
 Db 313 E 313

RESULT 7
 : Sequence 22.. Application US/10085198
 ; GENERAL INFORMATION:
 ; APPLICANT: Alsobrook et al.
 ; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
 ; FILE REFERENCE: 21402-229
 ; CURRENT FILING DATE: 2002-02-25
 ; PRIOR APPLICATION NUMBER: 60/1085,198
 ; PRIOR FILING DATE: 2001-02-26
 ; PRIOR APPLICATION NUMBER: 60/276,401
 ; PRIOR FILING DATE: 2001-03-16
 ; PRIOR APPLICATION NUMBER: 60/311,981
 ; PRIOR FILING DATE: 2001-08-13
 ; PRIOR APPLICATION NUMBER: 60/312,858
 ; PRIOR FILING DATE: 2001-08-16
 ; PRIOR APPLICATION NUMBER: 60/271,840
 ; PRIOR FILING DATE: 2001-02-27
 ; PRIOR APPLICATION NUMBER: 60/277,324
 ; PRIOR FILING DATE: 2001-03-20
 ; PRIOR APPLICATION NUMBER: 60/286,096
 ; PRIOR FILING DATE: 2001-04-21
 ; PRIOR APPLICATION NUMBER: 60/299,695
 ; PRIOR FILING DATE: 2001-06-20
 ; PRIOR APPLICATION NUMBER: 60/315,614
 ; PRIOR FILING DATE: 2001-08-29
 ; PRIOR APPLICATION NUMBER: 60/272,405
 ; PRIOR FILING DATE: 2001-02-28
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; Software: PatentIn Ver. 2.1
 ; SEQ ID NO: 22

Query Match 4.7%; Score 110; DB 6; Length 4544;
 Best Local Similarity 26.4%; Pred. No. 23; Gaps 11;
 Matches 51; Conservative 39; Mismatches 61; Indels 42; Gaps 11;

213 TELSQNIE---RYKIQSYSEYLKDFWGNP---LMLNKEYMFNAGNKNSYIKLKD 264
 Qy 598 TAVSAIDDELEVKYTISGNE-LGFYFLNPDS3VQLQKKS--LTNSGTKGNGNFAFLRIT 654
 Query Match 4.7%; Score 110; DB 6; Length 4544;
 Best Local Similarity 26.4%; Pred. No. 23; Gaps 11;
 Matches 51; Conservative 39; Mismatches 61; Indels 42; Gaps 11;

265 SPVGETILTRSKY-----NONSKYINYRDLYI-----GEKFITRKSNSQSINDDIVRK 312
 Db 655 ATDGENLADPMNSINISVLHKVSSKSFSCRETVAQKAELKLIAKANGK----LNL 708
 QY 313 EDIVYIDFENUNQENRVYTYKPKKEEEKLFLAPTSDSL---YNTQKEYDEQPTYS 369
 Db 709 EDG-FUDFY5INRQG----PYF---DKSFSPDVAKEDLPVGANILKIKAYDADSGF 7N 58
 QY 370 CQLFKDEESTD 382
 Db 759 GRVLFITSDGNTD 771

RESULT 8
 US-10-092-411A-4348
 ; Sequence 4348, Application US/10092411A
 ; GENERAL INFORMATION:
 ; APPLICANT: Lynn Doucette-Stamm et al.
 ; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 ; TITLE OF INVENTION: EPIDEMIDS FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 0327996-101
 ; CURRENT APPLICATION NUMBER: US/10/092,411A
 ; CURRENT FILING DATE: 2002-03-07
 ; PRIORITY APPLICATION NUMBER: US 09/134,001
 ; PRIOR FILING DATE: 1998-08-13
 ; PRIORITY APPLICATION NUMBER: US 60/064,964
 ; PRIOR FILING DATE: 1997-11-08
 ; PRIORITY APPLICATION NUMBER: US 60/055,779
 ; PRIOR FILING DATE: 1997-08-14
 ; NUMBER OF SEQ ID NOS: 5676
 ; SEQ ID NO: 4348
 ; LENGTH: 518
 ; TYPE: PRT
 ; ORGANISM: Staphylococcus epidermidis
 US-10-092-411A-4348

Query Match 4.7%; Score 109 5; DB 6; Length 518;
 Best Local Similarity 18.7%; Pred. No. 2.4; Mismatches 66; Indels 195; Gaps 23;
 Matches 98; Conservative 66; Length: 518

QY 7 SEILNNILNURYKDNNLIDLSGYGAKVEYVDGYELNDKQNFKLTSSANSKIRVTQNONI 66
 Db 61 SENIQLTNSNIGFKDEDEVNLYQYTDVKIAPTYYTVD---LISELNEVTRKEEQNKG 117
 QY 67 IFNSVFLDEFSWFLWIRPKYKNDGTONYINEYTTINCCKNNSSWKISIRGNRNIWILID 126
 Db 118 -----LRLYLNQQEFVTCYLNANJEHYDRAEFP-----147
 QY 127 INGKTKSVFFEYNIIRDSEYTFITNNLNNAKLY-----NGKLENTNDKRD- 179
 Db 148 VNGML-----IRKDFSYV-RPFSEYAPPDNKAKIYMRQFYNENGNSIAREYIED 198
 QY 180 -----REVANGELIIFKILD-----194
 Db 199 ERVVFDDARYSKQKLVATFIRQRLNNSDIIIDRTDVGQILENKSSKGKVWHA 258
 QY 195 -----GDIDRTOFIWVKY-----FSIENTELSONNTERYKIQSYSEYLKDFW 237
 Db 259 EHSEGATDGHILWNNYYQFENAQHIOFFITADLQRLTQBFQK-----QYKNDC- 312
 QY 238 GNPLMVKYMFNAGNKNSYIKLKDPSVGEILLTRSKYKNONSYINYRDLYIGKEFIR 297
 Db 313 -----PRKTIPIVSYIESLQYPERKERSVPSINTASRL-ANEHVD----WVEA-VK 359
 Qy 298 RKNSQSINDDIV-----RKEDYIYL-DEFNLNQEWRYTYKVKKEE 340
 Db 360 AHPOLPSFEDYGOQEEQKINLTKHRAEDIQKGRHNFRTIYQ-----409
 Qy 341 KLF LAPISDSIDLNTIQ-----IKEYDQPSYSCQLFKEKDE 379
 Db 410 ELIA-ASQSBEGFLTMMEAVGSGLGIGFDVNNGSPTFRHH-QNGYLIPIDE-BQA 464
 Qy 380 SUTRIGLIGH-----RTYESG-----TVFEYKDYFJCSK 411

Db 465 STDDITQIAHMLITYEDGPIRAHEVSYDIAESFKTSHTIVDLW 508
 RESULT 9
 US-10-092-411A-4669
 ; Sequence 4669, Application US/10092411A
 ; GENERAL INFORMATION:
 ; APPLICANT: Lynn Doucette-Stamm et al.
 ; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 ; FILE REFERENCE: 032796-101
 ; CURRENT APPLICATION NUMBER: US/10/092,411A
 ; CURRENT FILING DATE: 2002-03-07
 ; PRIORITY APPLICATION NUMBER: US 09/134,001
 ; PRIORITY FILING DATE: 1998-08-13
 ; PRIORITY APPLICATION NUMBER: US 60/064,964
 ; PRIORITY FILING DATE: 1997-11-08
 ; PRIORITY APPLICATION NUMBER: US 60/055,779
 ; PRIORITY FILING DATE: 1997-08-14
 ; NUMBER OF SEQ ID NOS: 5676
 ; SEQ ID NO: 4669
 ; LENGTH: 384
 ; TYPE: PRT
 ; ORGANISM: Staphylococcus epidermidis
 ; US-10-092-411A-4669

Query Match 4.6%; Score 109; DB 6; Length 384;
 Best Local Similarity 22.2%; Pred. No. 1.8;
 Matches 88; Conservative 63; Mismatches 139; Indels 106; Gaps 25;

Qy 111 WKISIRGNRLWTLIDING--TKSVFPEYNIRE--DISEYINRWFVTTNNNNAKTY 166
 Db 5 YTIKR-NEIMKIVVEKSRTNGTNEMLDGNBPIAVRILK--YLDSTRKSLATKTY 61
 Qy 167 INGLKLENTDIKDTRVIANGETIFK--LGDIDDRMOPFI-WMK---YSFIDENTLSQ 218
 Db 62 AYA-----LKEFVYLESKKICKEYSFEDNEVD--FIRWMKTPFEYENVLSHRKEK 111
 Qy 219 NIEER-----YKIQSEYL-----KDFWGNPLMNKEYMFAGNKNSY--- 258
 Db 112 SISPTAINITMTVSNFDLYRSKSKLDVNFTMHNKYRILK 171
 Qy 259 --IKLKDKSPVGELLTRSKYQNNSKYINRDLYIGEFRIIR----RKSNSQIN-DD 308
 Db 172 NILKVKEPKKKIETLNAAEVKKLLEAN---NIRXFLQLIYETLRGEVLSLRID 227
 Qy 309 I---VRKEDTYL-DFFNLQNQEWRYVYYKFKKEEFLA-----PSD--- 349
 Db 228 IKFDFRKGHQIVLKRNFDNG-----TLYKTGKFIFISOLIDYDDYVYEIDES 280
 Qy 350 --SDELYNTIQKEYDEOPTS-COLLFKKDBESTDEBILGIGH---RFYESGIVFEEY 402
 Db 281 ICSDYFLFVKIGRNVGAMNYSDIYSSEKRLKHCTS --INVPHPLFRTHATFYNET 336
 Qy 403 KDYFCISKHYLKEYKRK--PYNLKLGGCNWOFPKDE 436
 Db 337 KD-----IKQVQERLGHSNQTTINLYVHPTE 364

RESULT 10
 US-10-092-411A-3930
 ; Sequence 3930, Application US/10092411A
 ; GENERAL INFORMATION:
 ; APPLICANT: Lynn Doucette-Stamm et al.
 ; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 ; FILE REFERENCE: 032796-101
 ; CURRENT APPLICATION NUMBER: US/10/092,411A
 ; PRIORITY FILING DATE: 1998-08-13
 ; PRIORITY APPLICATION NUMBER: US 09/134,001
 ; PRIORITY APPLICATION NUMBER: US 60/064,964

Query Match 4.6%; Score 108; DB 6; Length 406;
 Best Local Similarity 19.5%; Pred. No. 2.2;
 Matches 77; Conservative 73; Mismatches 132; Indels 112; Gaps 21;

40 VELNDKNQFKLTSSANSKIRV---TQNQNIIFNSYELDFSYWIRIPKYK----- 87
 QY : : || : | : || : | : || : | : || : | : || : | : || : | : || : |
 Db 59 IYINQDSYINFNTS - NDLFITKYSIHLSSSRLYSGNSVV 110
 QY 88 --- NGDGINYIHEYTII----NCMKNSKGWIKSIRNRNRIWTLID - IN 128
 Db 111 YQQLEQAISEHNFEDALIFNSGYDANLAVENLKFNNNNVIFSDOQNAHA - SITIGKLS 168
 QY 129 GKTYSVFFENIRDISEYIINRFFVTTNNNNAKTYINGLESNTDIRDIREVANGE 188
 Db 169 GLSKVYQHUNY - DDLSESHLARH---TN-----PDYQKVIVS-D 202
 QY 189 LIFKLDG -- DIDTQFTWMKPSIFNPELOS -- NIEERY - KIOSYSEYLKDQEWG -- 238
 Db 203 SVFSTNGTKADINVLVHQLQRYNATILLIDASSIGLNUFEYHADDIVTSSLSKAWGANG 262
 QY 239 -----NPLMYNKEMYMFAGNKNSY---IKRKDKSPGEIUTRSKYNONSKYINY 285
 Db 263 GLLSSKDKDQLINKSRLIYSSSLPYHLYFIQVSLQHVTEDTYREKLNALEYFENH 322
 QY 286 R - DLYIGE -----KPTIIRRKSNSOSINDIVREKDYI - YLDFPNLNQEWRYTYK 334
 Db 323 QFMELPNQPLNTPIKNIWCDLSAQAYQDMLFENGIFVSYLRYPVSOPTLISY 362
 QY 335 FKKDEPKLFLAPISDSDLYNTIQKEYDEQPTYK 368
 Db 383 FHDOT -----DINRLENV - MKQDGEQDXY 405
 QY 384 FKKDEPKLFLAPISDSDLYNTIQKEYDEQPTYK 368

RESULT 12

US-10-092-411A-3626
 Sequence 3626; Application US/10092411A
 ; GENERAL INFORMATION:
 ; APPLICANT: Lynn Doucette-Straum et al.
 ; TITLE OF INVENTION: NUCLEARIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
 ; TITLE OF INVENTION: EPIDERMIDS FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 032796-101
 ; CURRENT APPLICATION NUMBER: US/10/092,411A
 ; CURRENT FILING DATE: 2002-03-07
 ; PRIOR APPLICATION NUMBER: US 03/134,001
 ; PRIOR FILING DATE: 1998-08-13
 ; PRIOR APPLICATION NUMBER: US 50/064,964
 ; PRIOR FILING DATE: 1997-11-08
 ; PRIOR APPLICATION NUMBER: US 60/055,779
 ; PRIOR FILING DATE: 1997-08-14
 ; NUMBER OF SEQ ID NOS: 5676
 ; SEQ ID NO 3626

Length: 331;
 TYPE: PRT
 ; ORGANISM: *Staphylococcus epidermidis*
 ; US-10-092-411A-3626

Query Match 4.6%; Score 107.5%; DB 6; Length 331;
 Best Local Similarity 20.8%; Prod. No. 1.9; Mismatches 50; Indels 115; Gaps 14;

Matches 71; Conservative 50; Nucleic acid sequence analysis results

QY 127 INGKTSV-----FEEYNIRE-DISBYINRMFFVTINN---LNNAKIYI 167
 Db 23 VEKKTEIVNDYLGCJEDDENYVKNLYSDLAPIEETLTAPPFSKKAIVKNSVFT 82
 QY 168 NGK---LESNTDIKIRENTANGBILFKLGOLDTRQFIMKYSFSENTELSQSNTIEER 223
 Db 83 GEKFSDKLNHSND-----ELI---KFLERYDGE-----NLIIFEVYQPKLDER 122
 QY 224 YKI-----QSYSEYLFWGNIPLAYNKEMYMFAGNKNSYIURKDSVGE 269
 Db 123 KKLTKTKKNAQQLKKEQMSEKELKHWRNTL-----NNYKDKDQDALELF 169
 QY 270 I-LTRSKYNNOSKTYNDRDLYIGEKFLIRRKNSQSINDIVREKDYI - YLDFENLNQE 326
 *Db 170 IELTGYNVNIVSQELKLIFIGERPIINKEDILINSLEONVFLLTETYIQRGNKNA 229
 Query Match 4.6%; Score 107.5%; DB 6; Length 331;
 Best Local Similarity 20.8%; Prod. No. 1.9; Mismatches 50; Indels 115; Gaps 14;
 Matches 71; Conservative 50; Nucleic acid sequence analysis results
 QY 327 WRVYTYKVFKKBEEKLFPLAPISDSDLYNTIQKRYDEQPTYSCLCOLFKRDEESTDTEIGL 386
 Db 230 IQLVNDLITMRKEPKLALLTISNRLY-----YQCKILSQK-----GY 268
 QY 387 IGTHREYESGTVFEEYKDYFCITSKWLKEYKRKPYNLKGCN 428
 Db 269 SG-----QQAQAKTVNAHPYPRVKALN 289
 RESULT 13
 US-10-145-087A-309
 Sequence 309; Application US/10145087A
 ; GENERAL INFORMATION:
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Baker Kevin P.
 ; APPLICANT: Bortstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan
 ; APPLICANT: Ferrara, Napoleon
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goodard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: KJLJAVIN, Ivar J.
 ; APPLICANT: Kuo, Sophia S.
 ; APPLICANT: Napier, Mary A.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Shelton, David L.
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acid Encoding the Same
 ; CURRENT APPLICATION NUMBER: US/10/145,087A
 ; CURRENT FILING DATE: 2001-10-18
 ; PRIORITY APPLICATION NUMBER: 09/9183585
 ; PRIORITY FILING DATE: 2001-07-30
 ; PRIORITY APPLICATION NUMBER: 60/062250
 ; PRIORITY FILING DATE: 1997-11-21
 ; PRIORITY APPLICATION NUMBER: 60/077450
 ; PRIORITY FILING DATE: 1998-03-10
 ; PRIORITY APPLICATION NUMBER: 60/07632
 ; PRIORITY FILING DATE: 1998-03-11
 ; PRIORITY FILING DATE: 1998-03-11
 ; PRIORITY APPLICATION NUMBER: 60/077459
 ; PRIORITY FILING DATE: 1998-03-11
 ; PRIORITY APPLICATION NUMBER: 60/064249
 ; PRIORITY FILING DATE: 1997-11-03
 ; PRIORITY APPLICATION NUMBER: 60/065311
 ; PRIORITY FILING DATE: 1997-11-13
 ; PRIORITY APPLICATION NUMBER: 60/066364
 ; PRIORITY FILING DATE: 1997-11-21
 ; PRIORITY APPLICATION NUMBER: 60/077450
 ; PRIORITY FILING DATE: 1998-03-10
 ; PRIORITY APPLICATION NUMBER: 60/07632
 ; PRIORITY FILING DATE: 1998-03-11
 ; PRIORITY FILING DATE: 1998-03-11
 ; PRIORITY APPLICATION NUMBER: 60/077459
 ; PRIORITY FILING DATE: 1998-03-11
 ; PRIORITY APPLICATION NUMBER: 60/077791
 ; PRIORITY FILING DATE: 1998-03-12
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 624
 ; SEQ ID NO 309
 ; LENGTH: 106
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-145-087A-309

Query Match 4.4%; Score 104.5; DB 6; Length 406;
 Best Local Similarity 21.4%; Pred. No. 3.4; Mismatches 43; Indels 91; Gaps 15;
 Matches 60; Conservative 43; Mismatches 87; Indels 91; Gaps 15;

Qy 151 WEFVTITNNLNAAKTYINGKLESNTDNDIREVYANGRI-----IFK 192
 Db 22 WYFTPYTEI-----TSLATEIDELINNAVALYNEADWCPRSOMEHPIFE 69

Qy 193 LDGDDIDRTQFIWMMKYSFINTELSQ-SNTEERYKTIOSSEYLKDFNGNPLAMYNKYYMFN 251
 Db 70 EASDVYKEEFFPNENQVVFARVDCQHSDAQRKRISKYPT-IKLF-RNGAMAKREY---- 123

Qy 252 AGNS-----SYIKLKDKPSVGET-----LTKSKYKRYDLYIGER 293
 Db 124 RQRSYKALAVIIRQKSQSDFQIERTLDAETLDRSKRKNIGYFQKDSDNR----- 176

Qy 294 FIRRKNSQSINDDVKRDYDYLDFEFLNQEFWRVY-----YK-YFKKEEKFLAPI 347
 Db 177 -VFERAN-----ILHDDCAFLASAFDVSKEPERSGDNTYKPPGHSADPMVYLGM 227

Qy 348 SDSDELYNTQKEYDEQPDYSC----QLLEKDEFESTDE 383
 Db 228 TNEFDVTTNWQDKD-----CVPLVRETFENGELTEE 259

RESULT 14
 Sequence 3015, Application US/10092411A
 GENERAL INFORMATION:
 APPLICANT: Lynn Doucette-Stamm et al
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCCUS
 TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
 FILE REFERENCE: 032796-101
 CURRENT APPLICATION NUMBER: US/10/092,411A
 CURRENT FILING DATE: 2002-03-07
 PRIOR APPLICATION NUMBER: US 09/134,001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: US 60/064,964
 PRIOR FILING DATE: 1997-11-08
 PRIOR APPLICATION NUMBER: US 60/055,779
 PRIOR FILING DATE: 1997-08-14
 NUMBER OF SEQ ID NOS: 5676
 SEQ ID NO: 2972
 TYPE: PRT
 ORGANISM: Staphylococcus epidermidis
 US-10-092-411A-2972

Query Match 4.4%; Score 102.5; DB 6; Length 570;
 Best Local Similarity 19.6%; Pred. No. 6.1;
 Matches 91; Conservative 71; Kismatches 138; Indels 165; Gaps 25;

Qy 2 ANKYNSEBLLNLLILRYKRONNLIDLSGKGAKVEYDG--VE-LND-----KNQFK 49
 Db 39 ATSYHFKMMLKVIL-----YAYTQSVFSGRKTEKMLNLSRNMLSONQ-K 83
 Qy 50 LSSANSKIRTHONNIIFNSWFWRIPKVKNDGQNYIHNEYTLINCKNNS 109
 Db 84 PSYKTINQFRVNPYKDALLESLIFQP-----1SQCYKQNLLDDKAIFD---- 127
 Qy 110 GWRKISIRGNR-TIVTL-----IDINGTKSVEFY-----NIREDISYEINWWFFV 154
 Db 128 GTKIEANANRYTFWKKSIONHESKMNDSKALYHELYTNKLIPEKEDHD----- 178

Qy 155 TITUNNNAKTYINGKLESNTDNDIREVYANGRI-----IFKLDGIDRQFIMMKYFSSENTE 214
 Db 179 --NLTKEEDLIGS-HLDKEIDLNOHNINNC
 Qy 215 LSQNTIEERYKIQSYSEYLKDFNGNPLMYNKEYMFNAGNKNSYIKLKKDSPV----- 267
 Db 212 TRQIRLKRIKKKKQNDYFER--KRYERQSKILKDRNSYSKTDYDATMRNKEDH 269

Qy 268 --GEILTRSKY-----QNSKYTYNDRY-----IGB-----KFTR----- 297
 Db 270 MKNGQL--KPOYNQIATNSQFVLINYQNPIDTRMIPFNSIOQTGHPEYVADA 327

Qy 298 --RKSNQSINDDIVRKEDYTYLDFENLNQERRVYKPFKEEKLFLAPISDDELY 354
 Db 328 GYGSENYKAIIDDDNRTP-----LITYGMFKDKRKY-----KSDIF 366

Qy 355 NTIQIKEYDE-QPTYS---QIIFKDEESTDBIGLGIHRYE 394
 Db 367 NT-QNWNYDEINDEFICPNKRLGFKRYARHKYGYRDRKELYE 410

Y 299 KSNSQSIND-----DIVRK--EDYIYLDFF 321

Fri Nov 1 18:34:11 2002

us-09-910-186a-8.rapn

Page 8

Job time : 14 secs